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INDEX will be found on third cover page of catalogue.

ORDER EARLY—It will greatly facilitate shipments if orders are sent in early. Our rush season comes in the months of March and April.

HOW TO ORDER—Write your name, postoffice, state and shipping point plainly on every order. Give plain express, mail or freight directions. Otherwise we use our own judgment in this matter.

TERMS—Our terms are strictly eash with order, except to customers who have previously arranged for a "Charge Account." Upon application, a reasonable credit will be allowed realty owners and other responsible purchasers.

REMITTANCES: can be made by postal money order, bank draft, registered letter or express company's money order. Amounts less than two dollars may be remitted in postage stamps.

IN ADDITION to this catalogue we issue two others, Vegetable and Flower Seeds, and Poultry Supplies; either one will be mailed on request.

PRICES ARE SUBJECT TO CHANGE—Owing to the frequent changes in the prices of the raw materials from which many of these articles are manufactured, the prices named in this catalogue are subject to change without notice.

PARCEL POST RATES

By giving us the Parcel Post "Uncle Sam" has made it easier for us to serve our "out of town" customers economically.

Except in a few instances we have named "Postpaid" prices on all mailable articles. On the articles excepted the postage may be determined from the Parcel Post table below.

For special information on the delivery of Vegetable and Flower Seeds see pages 59 to 68.

In ordering please state if to be shipped by Parcel Post, Freight or Express.

Seeds, plants, bulbs and similar articles, also books, weighing eight ounces or less, are subject to postage at the rate of one cent for each two ounces or fraction thereof, regardless of distance. Over eight ounces, pound and zone rates will apply.

All general merchandise weighing four ounces or less is subject to postage at the rate of one cent for each ounce or fraction thereof, regardless of distance. Over four ounces, pound and zone rates will apply.

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delivery only and does

not cover any damage.

All goods shipped

by Parcel Post at

owner's risk.

THE I. W. SCOTT Co.



To Our Friends and Customers, Greeting:

We take pleasure in handing you our 1917 catalogue. We come to you again with as reliable Seeds, Implements and other Farm Supplies as it is possible to obtain.

Our VEGETABLE AND FLOWER SEEDS are grown for us by the most reliable and experienced growers in Europe and America. Our customers will find them true to name and of high quality. Prices on these will be found on pages 59 to 68 of this catalogue, and to all who request it, we will send our special VEGETABLE AND FLOWER SEED catalogue which gives full descriptions of the different varieties and directions for culture.

Our FIELD SEEDS are selected with special reference to their purity and germinating qualities. Our aim has always been to furnish pure seeds rather than to sell inferior seeds, at low prices.

Our IMPLEMENTS are all standard makes, tried and tested for the purposes intended before being placed on the market.

Our DAIRY SUPPLY Department includes almost everything necessary for the proper equipment of the modern Dairy.

Our POULTRY SUPPLY Department includes a full line of the latest improved requisites for Poultry Raising and Egg Production, including an unsurpassed line of poultry feeds. These are fully described in our 76-page poultry supply catalogue, which will be mailed free on request.

We carry many lines of goods in stock that are not listed in this catalogue, and for this reason invite correspondence regarding the wants of our customers. If we cannot furnish the article inquired for we will endeavor to inform the inquirer where it can be had.

While the prices named in this catalogue are our regular selling prices, F. O. B. Pittsburgh, we give a reasonable discount for cash on many lines of goods. As this discount varies on different lines, customers should write for special discounts.

We extend to our old friends and customers our heartiest thanks for their generous patronage in the past and trusting to be deserving of their future favors, as well as the patronage of the numerous company of new agriculturists who are looking to the soil for pleasure and profit, we are,

Very truly yours,

THE I. W. SCOTT COMPANY.

WIARD PLOWS

The Wiard Plows have been continuously manufactured for more than a century. Their history has been a record of constant improvement in efficiency, strength and durability, and they are today recognized as leaders in this class of Agricultural Implements.

The real quality of an implement is shown, not by what its makers claim for it, but by the results which it gives in the hands of the average user. Therefore, go to the farmer, whom you consider fair and without prejudice, and see what he says about Wiard Implements; in other words, "Ask the man who owns one."

Space will permit of our showing but a few of the leading styles adapted to Pennsylvania soils, and customers who do not find the plow they are looking for described herein are requested to ask for complete catalogue, which will be mailed free.

WIARD ONE-HORSE PLOWS

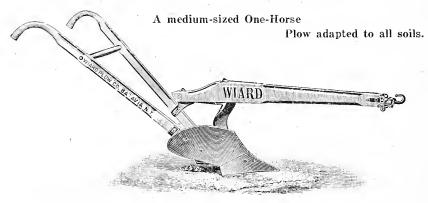


PRICE. Plain\$4.25

Wheel Extra 1.25

No. 62-Right Hand-Chilled Moldboard.

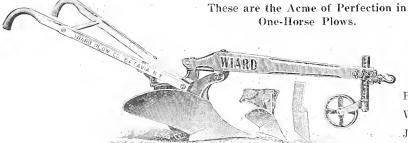
Capacity 3 to 5 inches deep, 6 to 8 inches wide, weight 40 pounds.



No. 13-Right Hand-Chilled Moldboard.

Capacity 4 to 6 in. deep, 6 to 9 in. wide, weight 52 lbs.

Price without wheel\$6.25



PRICE.

Plain\$7.50 Wheel Extra 1.25 Jointer Extra 2.00

No. 10C-Right Hand-Chilled Moldboard.

No. 10C-Capacity 4 to 7 inches deep, 6 to 11 inches wide, weight 77 pounds.

A Full Line of Extras for Wiard, Oliver, Gale, and South Bend Plows Always in Stock. Accept None but the "Genuine."

OLIVER CHILLED PLOWS

The Oliver Chilled Plow needs no introduction to the Pennsylvania farmer. So great is the popularity of these Plows that unscrupulous parties are seeking to trade upon their good name by making and offering for sale imitation Plows and parts as genuine.

We have space to show but a few of the leading favorites among Pennsylvania farmers, but will send a complete catalogue on request. A full line of genuine Oliver repairs always in stock.

The "B N" Wood

Beam, Full

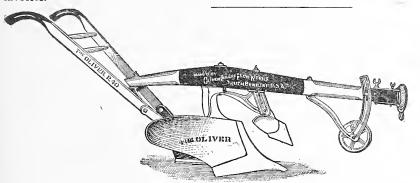
Chilled, Sloping

Landside

Wood
Full
oping
de

RIGHT HAND ONLY.

The "BN" Plow is a light one-horse plow. It will turn a furrow 5x10 inches, and is a prime favorite.



The No. 40 N Wood Beam, Full Chilled, Sloping Landside, Right and Left Hand

The No. 40 N is a two or three-horse plow, first class in all respects and immensely popular, its sales exceeding those of any other plow in use. Always reliable, its great capacity, steady running and turning qualities, make it valuable in sandy or alluvial lands, and on farms containing a variety of soils. On hilly land it is unrivaled, and for a general purpose plow has no equal. It will turn a furrow 9x16 inches.

The E-1 N Wood Beam only, Full Chilled, Sloping Landside, Right and Left Hand



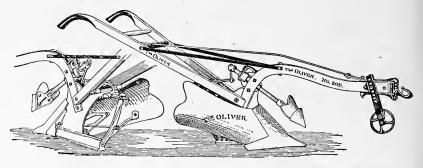
The E-1 N Plow is a very popular heavy two-horse or light three-horse plow, and intended for general purpose work. Capacity 7x14 in.

For Prices see next page.

- Ges

OLIVER No. 509 HILLSIDE, STEEL BEAM PLOW

Capacity 5 to 8 in. deep, by 12 to 15 in. wide.



The above illustration shows a new and very neat pattern of hillside plow, which possesses so many valuable features as to make it a leader of its class. It is lined to work perfectly when reversed either way and all the parts are attached in the simplest yet strongest manner. Light in weight, light in draft and the shape and turning qualities are A-1. Bottoms are long, insuring steadiness and ease of handling.

PRICES OF OLIVER PLOWS.

		Plain	Wheel Extra	Jointer Extra
3	No. A-2—Wood Beam Right Hand, One Horse	\$ 5.50	\$ 1.00	\$ 2.00
	No. B-N-Wood Beam Right Hand, One Horse	8.00	1.00	2.00
	No. 10-N-Wood Beam R. or L. Hand, One Horse	9.00	1.00	2.00
-]	No. 13-N-Wood Beam R. or L. Hand, Two Horse	10.00	1.00	2.00
]	No. 20-N-Wood Beam R. or L. Hand, Two Horse	11.25	1.25	2.50
]	No. 40-N-Wood or Steel Beam R. or L. Hand, Two Horse	12.50	1.25	2.50
	No.E-1-N-Wood Beam R. or L. Hand, Two Horse	12.50	1.25	2.50
	No. 83—Steel Beam R. or L. Hand, Two Horse	11.75	1.25	2.50
	No. 84—Steel Beam R. or L. Hand, Two Horse	12.25	1.25	2.50
`	No. 51—Wood Beam Hillside, One Horse	7.25	1.00	
	No. 57-X—Wood Beam Hillside, Two Horse	12.50	1.25	2.50
	No. 508—Trussed Steel Beam Hillside, Two Horse	14.25	1.25	2.50
	No. 509—Trussed Steel Beam Hillside, Two Horse	14.75	1.25	2.50

MAPES SUBSOIL PLOWS

In every section subsoiling is absolutely necessary. We believe the Mapes will do the work better, with less draft than any other Plow built. Fitted with heavy Beam, forged Steel Shoe and Cutter. Draft Rod, Index Clevis and Wrench.

It is intended to follow an ordinary breaking Plow, loosening and exposing the subsoil to atmospheric influences to the depth of 10 to 14 inches and leaving the ground in the best possible condition to retain moisture, and the crop to withstand drought. Where the subsoil is inferior in fertility to the surface this treatment is preferable to trench plowing. Made in Wood Beam only.

Much used by nurserymen for root-pruning, and preparing soil for cultivation of grapes. Requires two to four horses, according to depth.

Price \$15.25. Wheel Extra \$1.25

A Full Line of Extras for the Wiard, Oliver, Gale and South Bend Plows Always in Stock. Accept None But the "Genuine"

Wiard Subsoil Plow

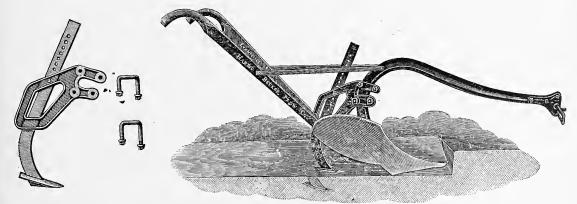


Right Hand, Sub-Soil. Weight 106 lbs.

A strong and serviceable sub-soil plow, intended to follow in the furrow of the turning plow, and to loosen the soil in the bottom of the furrow from three to six inches deep.

This plow is being used by some of our best practical farmers, and is especially adapted for use in the culture of crops, where deep cultivation gives the best results. For ditching purposes it has no equal.

The Hartig-Becker Subsoil Attachment



Subsoil Attachment Attached to a Plow.

It is admitted that by SUBSOILING the farmer or planter will secure much better results than by any other means, but the price of a subsoil plow and the expense of the extra man and team required, has been one of the principal reasons that subsoiling has not been practiced.

These SUBSOIL ATTACHMENTS can be attached direct to the turning plow. With this attachment the plowing and subsoiling can be done in one operation, saving the farmer or planter the expense of the extra man and team. The service of an extra horse depends upon the soil and the depth being plowed and subsoiled.

These Subsoil Attachments can be adjusted by changing the bolt in the upper part of frame and through the upright, to the series of holes in the upright, to subsoil as deep as eight (8) inches under the turning plow furrow, leaving the subsoiled clay or hard pan, under the furrow.

The frames of these Attachments are of the best heavy malleable iron, and the uprights 2x% inch high grade coulter steel.

The blades are 31/2x8 inches, of % inch high grade steel, and can be detached to be sharpened.

PRICES

No. 1	For Right Hand Steel Beam Plows	\$5.25
	For Left Hand Steel Beam Plows	
No. 3	For Right Hand Wood Beam Plows	5.25
No. 5	For Left Hand Wood Beam Plows	5.25

Wiard Reversible Sulky Plow



The Wiard (New Model Reversible or Two-Way, Power Lift Sulky Plow, Lift and Trip Operated by

Hand or Foot), with Shifting Pole, Automatic Shifting Clevis and Adjustable Tilt
ing Seat and Steel Wheels.

No. 400—Two or Three-Horse—Weight 550 lbs.

The Double Sulky can be fitted with the following bottoms:

Nos. 100 right and 95 left. Cuts 6 to 9 in. deep, 10 to 14 in. wide.

Nos. 43 right and 103 left. Cuts 4 to 7 in. deep, 9 to 13 in. wide.

Nos. 44 right and 104 left. Cuts 5 to 8 in. deep, 11 to 15 in. wide.

With Steel Molds only.

With Chilled or Steel Molds.

With Chilled or Steel Molds.

This Sulky is adapted to all soils, leaves no ridges or dead furrows and does perfect work on either level land or side hill.

It is very simple, easy to handle and is lightly constructed, the material used being mostly steel and malleable iron, making it very strong and durable.

As shown in the illustration, there are two plows, one right and one left hand, both operated by separate levers and having AN AUTOMATIC POWER LIFT which can be operated by the driver from the seat either by the use of a trip lever operated by the foot, or by a hand trip lever which can be operated by the driver either when riding or walking. The Plows have the highest grade chilled iron or soft-center steel moldboards, and either forged steel or cast iron points as ordered, and can be fitted with jointer or plain colter, as desired.

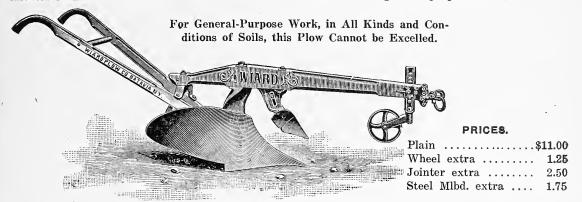
The Pole Shifter is operated by a hand lever, which enables the plowman while riding or walking to shift the pole either to the right or left at any angle desired, to suit the team and get the proper width of furrow, either on flat land or side hill. without side draft.

The Automatic (Power Lift) Foot Trip operated as follows: The plow is lifted from the furrow by the team while in motion, by pressure of the foot on the foot trip lever, until the plow begins to lift and the lever moves forward, which will then release and lock itself in place. The lift can also be operated by hand by the driver, either from the seat when riding, or when walking behind. It unlocks by pressure of the foot on the foot trip or by hand by pressure of the upper rear handle of dog, lowering the plow.

PRICE.

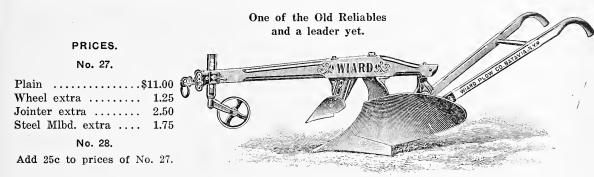
WIARD TWO-HORSE PLOWS

The Plows shown on this and the following page are constructed with special reference to obtaining the greatest strength with least weight. They have been thoroughly tested by hundreds of farmers in all kinds and conditions of soil and are unexcelled for general purpose work.



No. 261/2—Two Horse—Right Hand.

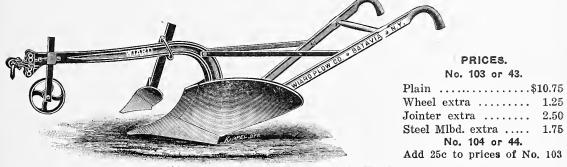
Capacity 5 to 8 inches deep, 10 to 14 inches wide, weight 115 pounds.



Two Horse-Left Hand.

No. 27—Capacity 6 to 8 inches deep, 10 to 14 inches wide, weight 105 pounds. No. 28—Capacity 7 to 9 inches deep, 12 to 16 inches wide, weight 112 pounds.

WIARD PATENT STEEL BEAM PLOWS



Chilled or Steel Moldboards, Left Hand.

No. Size.	Capacity.							
103-Two-horse.	4 to 7 inches deep, 9 to 13 inches wide.	120 lbs.						
104-Two or three-horse.	5 to 8 inches deep, 11 to 15 inches wide.	130 lbs.						

The above shows our latest "New Pattern" series of combination, grooved steel beam, general purpose plows.

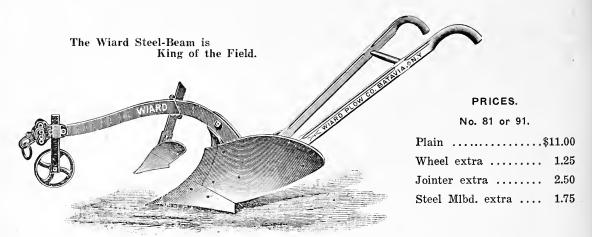
The No. 103 is a two-horse plow of medium capacity, and is suited to either sod or stubble plowing.

The No. 104 is a regular two or three-horse plow, suited to all soils.

No. 43, Right Hand, same as No. 103 Left Hand.

No. 44, Right Hand, same as No. 104 Left Hand.

WIARD PATENT STEEL BEAM PLOWS



No. 81-Left Hand. No. 91-Right Hand.

Capacity 5 to 8 in. deep, 10 to 14 in. wide, weight 128 lbs.

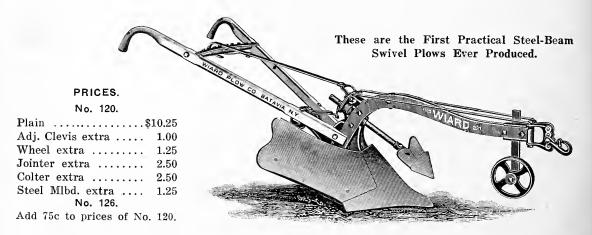
This is one of the most popular series of plows on the market. While they are light both in weight and draft, they are very strong. The moldboards have superior turning qualities, and they are adapted to all conditions of soil. They are so balanced that they handle easily. They have great strength and wearing qualities.

WIARD SWIVEL OR HILLSIDE PLOWS

The Wiard Swivel Plows are so well known throughout Pennsylvania that a detailed account of their merits seems unnecessary here.

All of the Two-Horse Plows shown here are furnished with either Common or Adjustable Clevis, as shown in the illustrations.

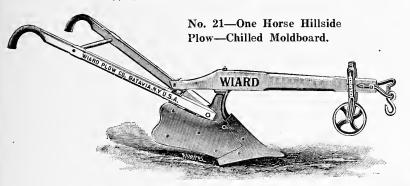
WIARD STEEL BEAM SWIVEL PLOWS



No. 120—Capacity 5 to 8 in. deep, 10 to 13 in. wide, weight 118 lbs. No. 126—Capacity 5 to 8 in. deep, 12 to 15 in. wide, weight 139 lbs.

The beams are of highest grade forged steel, and are stronger than any other beam made. They are so adjusted that the plow works perfectly when reversed either way, and all the parts are attached in the simplest but strongest manner.

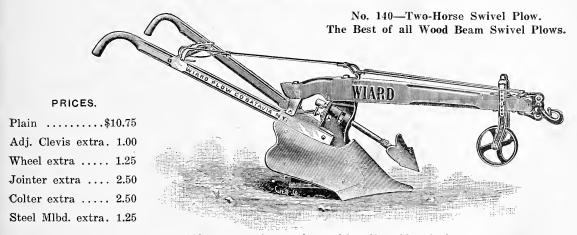
WIARD WOOD BEAM SWIVEL PLOWS



Capacity 4 to 7 inches deep. 6 to 10 inches wide, weight 77 pounds.

PRICE.

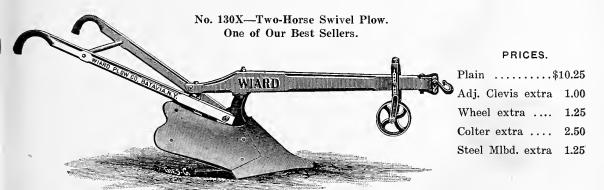
Plain			٠.	. \$8.25
Wheel	extra	1		. 1.25



(Above cut shows plow with adjustable clevis.)

Capacity 5 to 8 in. deep, 10 to 13 in. wide, weight 115 lbs.

This is the most superb of all Wood-Beam Swivel Plows. It has a strong, high standard and long shoe, making it one of the most steady running plows in our list.



(Above cut shows plow with Common Clevis.)

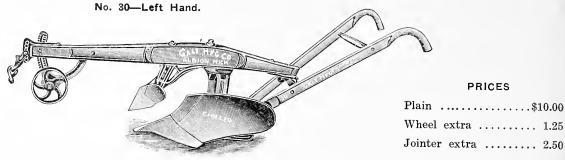
This plow has about the same capacity as the No. 140, the wearing parts being the same except the shoe. The outlines are somewhat different, as shown by the cut, and the plow is lighter. It can be fitted with either cast-iron or soft center-steel moldboard, adjustable clevis and adjustable automatic colter. This plow has been on the market for many years and has stood the test of time. Capacity 5 to 8 in. deep, 10 to 13 in. wide, weight 104 lbs.

WIARD ROAD OR CONTRACTORS' PLOWS

The Wiard line of Road and Contractors' Plows is unexcelled. They are made in different sizes, and are used extensively in Township Road Work, Excavating and Grading.

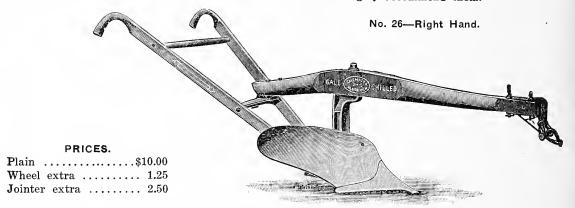
A special Catalogue and Prices will be mailed on request.

GALE WOOD BEAM CHILLED PLOWS



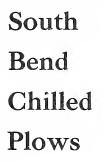
Capacity $6\frac{1}{2}$ to $7\frac{1}{2}$ inches deep, 13 to 15 inches wide, weight, as shown above, 132 lbs. Weight of Plain Plow, 106 lbs.

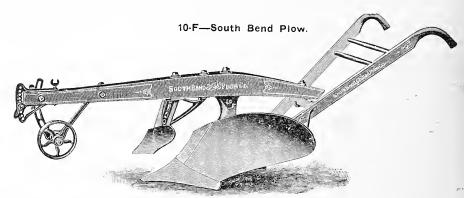
One of our most popular plows. It is unexcelled as a general purpose plow, and there are hundreds of them in use in Western Pennsylvania. We can highly recommend them.



Capacity 7 to 8 inches deep by 14 to 15 inches wide.

Similar to No. 30 Left Hand, only a trifle lighter. This plow has long been a favorite with those who prefer a right-hand plow.





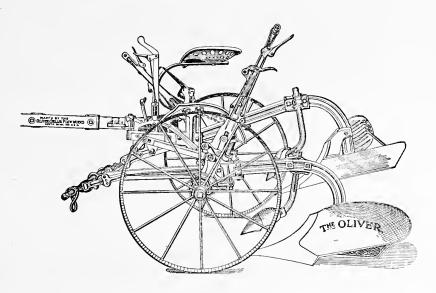
South Bend Plows have been used with unvarying success for the past twenty years and are favorably known throughout Western Pennsylvania.

The 10-F Plow shown above is made in Right and Left Hand with Chilled Moldboard and is a great favorite among plowmen. It has a high moldboard and great furrow capacity.

PRICES.

	Wood Beam	Steel Beam	Wheel Extra	Jointer Extra
No. 1-B—One Horse Right Hand	\$ 5.50		\$ 1.25	\$ 2.25
No. 2 —One Horse Right or Left Hand	8.25	l i	1.25	2.25
No. 4 —Two Horse Right or Left Hand	10.50	l l	1.25	2.25
No. 10-F—Two Horse Right or Left Hand	11.00	11.75	1.25	2.25
No. 15 —Two Horse Right Hand	11.00	1 1	1.25	2.25
No. 302 —One Horse Hillside	8.25		1.25	2.50
No. 305 —Two Horse Hillside		12.75	1.25	2.50
No. 306 —Two Horse Hillside	11.75		1.25	2.50

THE OLIVER No. 23 REVERSIBLE SULKY PLOW



The No. 23 Sulky Plow can be fitted with following bottoms:

No. 83 right and left, capacity about 7x14 inches, Chilled or Steel Moldboards.

No. 84 right and left, capacity about 8x16 inches, Chilled or Steel Moldboards.

In sections where this plow has been used, it has become very popular, which has been proven by the sales which have grown by leaps and bounds.

By means of the "horse-lift" which is brought into play by simply pressing forward slightly on the foot trip, the operator's work is diminished by fully one-half and it is not necessary to lean way back in an uncomfortable and often unsafe position to use the hand lever. With this plow the operator can keep his eyes on his team and his hands on the reins, the feet only are needed in order to raise the plow.

Second only to this important improvement is the simple and easily operated tilting device connected with the seat of this sulky, which when plowing along hillside while the machine is, of course, leaning down hill, makes it very easy for the operator to keep a level seat and maintain the equilibrium of the plow.

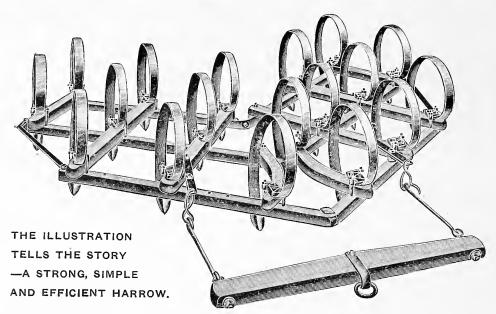
Additional distinct points of advantage are the most approved and convenient guiding lever most effectively applied, and the greater range of pole-shift for hillside plowing. The turn table on beam makes it possible to land the plow to suit any and all conditions—changing the plow for use with two or three horses is a simple and easy matter—a draft device is provided that is sure to work satisfactorily—and the hitch never fails to operate correctly.

PRICE.

WE CARRY IN STOCK COMPLETE LINE OF GENUINE OLIVER REPAIRS

IF INTERESTED IN ENGINE PLOWS, WRITE US FOR SPECIAL CIRCULARS AND PRICES.

PITTSBURGH COMBINATION HARROW



BEAMS—The under side of the Pittsburgh Combination Harrow is constructed of high carbon angle steel beams, and the upper side of best OAK beams, so there is no wear against the wood parts.

TEETH—Best spring steel, formed so that the pitch can be changed to suit the operator. They fasten on top of the frame and the bolt heads are protected so they will not wear off. This harrow is taking the place of the Perry Wood Frame Spring Tooth Harrow.

STUMP GUARDS (or Braces), placed to protect the frame and make it perfectly rigid.

PRICES.

With 16 Spring Teeth\$11.50

With 18 Spring Teeth \$12.50

Eureka
Combination
Harrow



THE "EUREKA" COMBINATION HARROW has a construction which is far superior to the usual wood frame harrow, and has as long life as an all steel harrow.

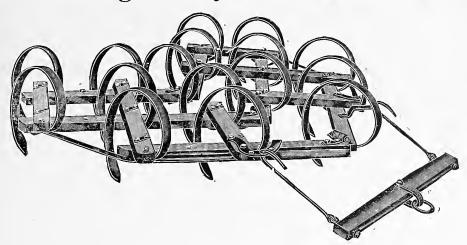
It is made with channel steel tooth bars and wood cross bars. All parts that are subject to any wear are steel or malleable iron.

The tooth clips are malleable. The legs of the channel bars hold the clips in perfect alignment and prevent wear of the clips and heads of bolts. Neither the clips nor teeth come in contact with the wood cross bars.

Fenders or guards are attached to each frame to brace the frames and prevent bars catching on fences or obstructions.

PRICE-With 16 Teeth, \$12.00; With 18 Teeth, \$13.00.

The Pittsburgh Perry Wood Frame Harrow



WOOD FRAME STEEL LINED HARROW

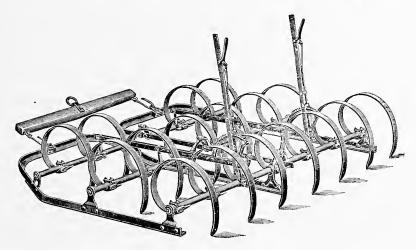
Lined, Guarded, Protected Bolt Heads, Perfect Tooth Seat, Adjustable Hitch
THE BEST OF THE "WOOD FRAMES"

The Best Wood Frame Harrow on the market. Beams full 3 inches; linings No. 12 gauge steel; bolts % inch; teeth are full length and weight, tempered in oil and fully warranted; our tooth fasteners are channel steel. Steel Braces support and strengthen the outer end of the Harrow.

These Harrows are well made and hinged properly so that they will not buckle in the middle, but ride evenly, pulling all teeth in the ground at about an even depth.

Price with 16	Teeth	\$10.50
Price with 18	Teeth	11.50

Badger Spring Tooth Lever Harrow



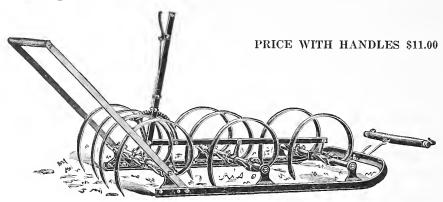
A Runner Frame Harrow—the popular style frame—and holds a prominent position with the trade. It has stood the test of years. Kept thoroughly improved and up-to-date.

ONLY THREE RUNNERS—Of angle steel are used on the Badger, which give the Harrow great clearance and avoid clogging. This construction also causes the Harrow to always run steadily and cut uniformly. All the runners have steel renewable shoes. The nose of the Harrow is sloped so as to easily avoid obstructions.

TOOTH BARS—Of 1¼ inch diameter steel pipe make a very strong frame, with light weight. These bars are attached to the malleable frame brackets by steel rods running the whole length of pipe on the inside. The Badger also has Patented Tooth Clips.

Price with 15 Teeth	 \$19.00
Price with 17 Teeth	

Badger Nine-Tooth Lever Harrow

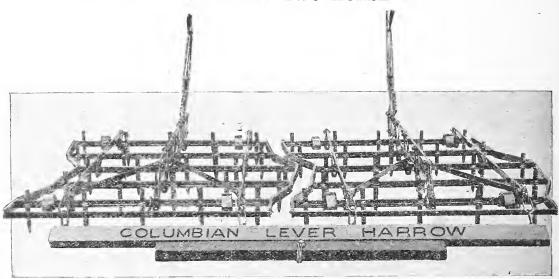


A very popular Harrow, and is used extensively for gardens, small farms and orchards. It is neat and perfect in construction and very strong, and is thoroughly guaranteed. Made entirely of steel and malleable iron.

By using firmly attached steel handles, the operator controls the Harrow the same as a cultivator. The frame is made in one piece, of angle steel, the same size and weight as used on the two-horse Harrows and is sloped at the front to easily avoid obstructions. It also has steel renewable shoes. Width 36 inches.

"Columbian" Steel Lever Harrow

ONE AND TWO HORSE



The Columbian Harrow is made with Lever Adjustment, so that the teeth can be changed to any slope quickly and with little exertion on the part of the operator.

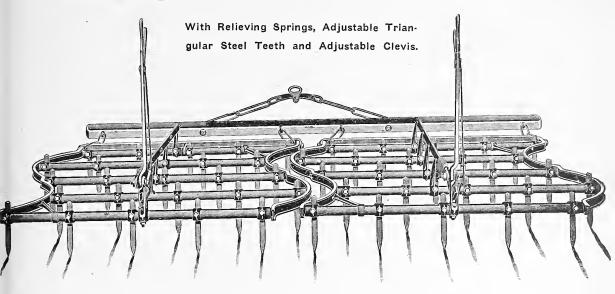
The main bars are U-shaped, and made especially for Harrow purposes, from an extra quality of steel, very high in carbon, which insures it against bending, even under the most severe strain. The Cross Bars and Braces are rolled flat from same kind of material. Great pains have been taken to preparing the patterns for the different parts, so that when put together they will be free from "lost motion," and respond quickly to the action of the Lever.

The Tooth Clamp is without doubt the best yet devised and consists of stirrup bolt and back and front boxing. When fastened with this device, the teeth would not be more rigid if a part of the bar itself. Teeth can be raised or lowered any distance, and any size can be used, from one-half inch square to seven-eighths inch square. The Stirrup Bolt Clamp is fixed to take the common stock teeth carried by all dealers. It is securely braced and nicely finished.

PRICES.

One Horse—with 2	Teeth—one	section	\$ 7.50
Two Horse-with 5	Teeth—two	sections	13.50
Two Horse-with 6	Teeth—two	sections	14.00

Pittsburgh Spike Tooth Lever Harrow

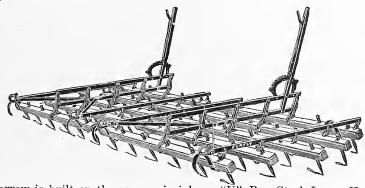


The Relieving Springs in this harrow allow the teeth to yield in meeting an obstruction, thus saving the strain and breakage not only on the teeth but on the frame as well, combining all the advantages of the spring-tooth with the even cutting of the spike-tooth harrow. By means of the levers the teeth can be thrown in a perpendicular position, or at any angle. For transportation purposes they can be thrown clear of the ground allowing the harrow to rest entirely on the shoes. This makes this harrow not only a good general purpose harrow, but an excellent smoothing harrow as well, and will answer the purpose of a weeder for the first cultivation of corn and potatoes.

 Price with 50 Teeth
 \$13.25

 Price with 60 Teeth
 13.75

Furfly Two-Section Wood Bar Lever Harrow

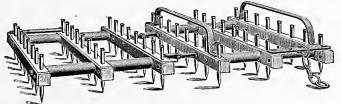


PRICES.

With 50 Teeth..\$13.00 With 60 Teeth.. 14.00

This Harrow is built on the same principle as "U" Bar Steel Lever Harrow, the only difference being in these we use wood tooth bars instead of the steel. The slant of the teeth can be changed instantly by means of the lever. It is the only successful Wood Lever Harrow that has yet been brought out.

Malta Spike Tooth Harrows

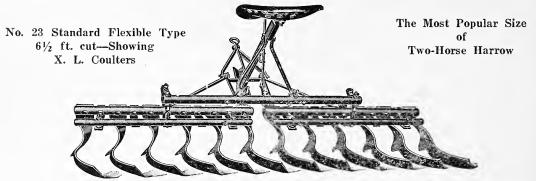


PRICE,

\$9.50

The wood work is of the best quality of thoroughly seasoned White Oak. The frames are closely jointed, and made secure and solid by steel rods passing entirely through them. All Tooth Bars are riveted at each end.

"ACME" TILLAGE TOOLS Pulverizing Harrows and Surface Cultivators



The Coulters on "ACME" Pulverizing Harrows work down between the furrow slices filling the air spaces with finely pulverized soil, lumps and clods are thoroughly broken up and pulverized; trash or stubble that has been carefully plowed under is not dragged to the surface as is the case with many other types of Harrows but is left beneath the surface where it rapidly rots and adds humus to the soil. The seed bed prepared by the "ACME" Harrow is well compacted so that the seed will germinate rapidly, the surface is finely mulched so that all the moisture is conserved. The user of an "ACME" Harrow will find that even though the season be dry his seed bed will attract and retain sufficient moisture to carry him through to a successful crop. bed will attract and retain sufficient moisture to carry him through to a successful crop.

The man owning an "ACME" is completely equipped for the preparation of the seed beds after plowing regardless of the class of soil he has to work. Everything a Harrow ought to do, the "ACME" does. It cuts, crushes, levels, turns, smooths all in one operation thus completely fitting the seed bed for the seed. It has received the endorsement and unqualified praise not only of almost all state Experiment Stations but of the most up-to-date farmers throughout the entire

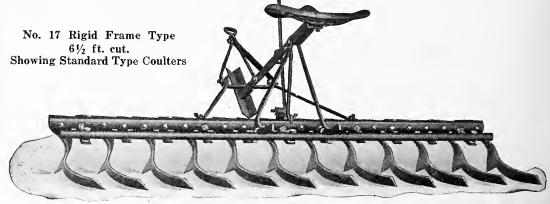
The material and workmanship entering into the construction of "ACME' Pulverizing Harrows and Surface Cultivators is the very best; all parts of the Harrow are steel and are practically indestructible; the coulters are made of a special mixture, beveled steel and are all hardened; we have records of coulters in use twelve years before being replaced with new ones. The frame

of the Harrow will last indefinitely, and after the coulters have been worn out new ones can be procured which will give you a Harrow just as good as when it originally left the Factory.

X. L. SERIES. Harrows: These are made in the same sizes as the regular Harrows but are equipped with X. L. Coulters that are longer, overlap and have more flare, ideal for killing small weeds as the whole surface is out over also extensively used for summer fallow.

small weeds, as the whole surface is cut over; also extensively used for summer fallow.

In addition to the flexible type we are also manufacturing now Harrows of rigid frame construction.



We have sold the "ACME" Harrow for many years and customers who have worn out their second Harrows tell us that they can find no other Harrow that can do the work of the "ACME" in preparing the ground for the seed.

Size.		Width	Description.	Standard Type.	X. L. Series.
G	62 lbs.	3 ft. 0 in.	1 horse, 1 section	\$ 8.50	\$ 9.00
H	105 "	4 ft. 4 in.	1 horse, 1 section	12.50	13.50
17	115 "	6 ft. 6 in.	2 horse, 1 section	14.75	16.00
23	130 "	6 ft. 6 in.	2 horse, 2 section	17.00	18.00
26	160 "	8 ft. 6 in.	2 horse, 2 section	19.50	21.00

Prices upon other sizes as well as Extra Parts will be promptly quoted upon application.

The Meeker Disc Smoothing Harrow



A PERFECT HARROW AND A PERFECT LAND ROLLER COMBINED.

This harrow has become a great favorite among all classes of farmers and market gardeners in all parts of the country.

It has two sets (four) of rollers containing 58 steel discs. These discs grind all lumps and save the work of raking, and also mash small stones below the surface better than any field roller, leaving the land smooth and level.

The discs of one roller work between those of the other, preventing clogging in damp soil. The board in the center is set at an angle, is adjusted up or down and serves as a leveler. Other sizes furnished with 10 inch discs, prices on request.

"I have used the Meeker Harrow on my seed farm for a number of years. By actual test I find that in the final work of preparing a bed for planting of small seeds, such as onion, carrot and beet, it will do the work of over a dozen men. I claim it among the most valuable of my implements."—JAMES J. H. GREGORY, Marblehead, Mass.

PRICES.

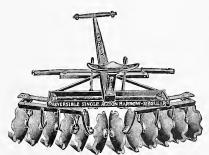
Two-Horse,	regular	size	6 ft.	8 in.	by 6	ft.	with	58 8	8-in.	Discs.	Weight,	220	lbs\$24.00
One-Horse,	special	size.	4 ft.	6 in.	bv 4	ft.	with	46	8-in.	Discs.	Weight.	200	lbs 22.00

Cutaway Reversible Single Action Harrow

The Cutaway (Clark) Single Action Harrow was built up to a standard measured by actual field conditions of the most severe type. Observe in the illustrations that the head is built directly on top of the gangs. Note the tongue, seat, braces and levers are all fastened to it, thereby making the disks carry the entire weight of the machine. This construction gives such a perfect balance that there is practically no weight on the horses' necks, and makes the use of the tongue truck optional with the user. Without a tongue truck the hitch is placed back close to the machine and the draft is the very minimum.

The Cutaway Single Action Harrow is reversible; that is, the gangs can be swung end for end, so that the soil may be thrown either out or in. To reverse, it is only necessary to pull the cotter pins that hold the lever links, drop the links, swing the gangs around and reattach links.

The Cutaway Single Action Reversible Extension-Harrow can be extended for orchard or vineyard work. This reversible feature is important to the orchardist. It makes it possible for him to ridge the land and level it as he desires. He can throw the soil to his trees at one cultivation and away at the next, or it can be closed up for regular field work in a few minutes. No extra parts are needed in shifting gangs out or back.



PRICES.

									St	eel Head
A 5	10-16	inch	$\mathbf{Discs}\!\!-\!\!2$	Η.	Н.,	Regular	 \$25.75	Extension		\$27.25
A 6	12-16	inch	Discs-3	Η.	Н.,	"	 30.50	Extension		32.00
X 5	10-18	inch	Discs-2	н.	Н.,	"	 28.00	Extension		29.50
X 6	12-18	inch	Discs-3	H.	Н.,	"	 33.00	Extension		34.75

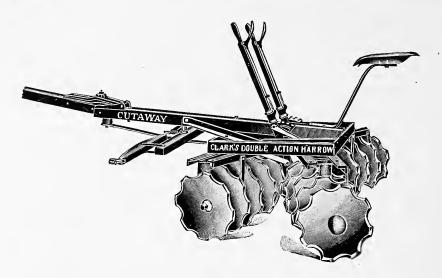
If Wood Head is wanted instead of Steel Head deduct \$1.00 from above prices.

If Tongue Truck is Wanted Instead of the long pole Add \$4.00 to Above Prices.



Double Action Disc Harrows

Made in Regular and Extension Heads—and in sizes for all



The illustration above shows the CUTAWAY (CLARK) DOUBLE ACTION—REGULAR. Observe that this machine is built with all four gangs attached to one rigid main frame. The rear disks are held so that they cut and pulverize the soil between the furrows cut by the fore disks. All the soil over which the machine passes is thoroughly worked. Moreover, the soil thrown outward by the fore disks is thrown back by the rear disks and the surface of the land is left level. This CUTAWAY (CLARK) DOUBLE ACTION HARROW constantly works at leveling the ground, cutting down the high places, filling in the hollows, leaving a seed bed in both places.

Also observe the compactness of this harrow. The length of the entire load (that is, the distance from the hitch to the extreme rear end of the machine) in the CUTAWAY (CLARK) DOUBLE ACTION is about one-half the length of the load in the tandem and trailing types. The draft is therefore but one-half to three-fourths as much as in these substitute machines of corresponding size.

There is no tongue truck on this machine. There is absolutely no use for it; yet nothing is sacrificed. Instead, money is saved the buyer.

The disks on all CUTAWAY (CLARK) machines are made of special cutlery steel, and forged sharp. Either cutaway or solid disks are furnished. The quality and price are the same. Unless solid disks are specified all machines are equipped with cutaway disks.

The bearings are the famous CLARK hardwood, soaked in oil, all encased in a dust-proof box.

Note the jointed pole, which may be attached or detached in one minute, making it possible to use the harrow either as a tongueless or a tongue, machine at any moment.

The CUTAWAY (CLARK) DOUBLE ACTION—EXTENSION HEAD—is the same as the CUTAWAY (CLARK) DOUBLE ACTION—REGULAR—shown in the illustration, making it possible to extend the gangs out beyond the team for orchard cultivation. They close up for general work.

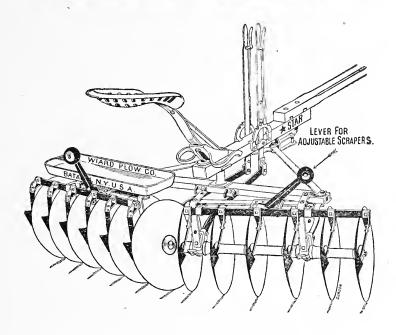
							Regular	Extension Head.
A-4	16-16"	Disks	Double	Action-2	H.	H	\$39.00	\$42.00
A-5	20-16"	Disks	Double	${\bf Action-3}$	H.	H	. 44.75	47.75
A-6	24-16"	Disks	Double	Action-4	H.	н	. 49.25	52.75
X-4	16-18"	Disks	Double	Action—2	H.	H	43.75	46.75
X-5	20-18"	Disks	Double	Action-3	H.	н	. 52.25	55.75
X-6	24-18"	Disks	Double	Action-4	H.	Н	. 62.25	65.75

If 2 Horse Hitch is wanted in place of the 3, or 3 Horse Hitch in place of 4, deduct \$1.00 from above prices.

Descriptive catalogue and prices on other sizes of double action and reversible single action Harrows mailed on request.

We are general agents for Cutaway Harrow Co. and can furnish any Cutaway tool made by them.

STAR DISC HARROW



This cut shows our Star Disc Harrow with adjustable cleaners or scrapers, which are operated by a lever. These cleaners can be fitted to all sizes of Star Harrows except the No. 1.

They are made of tempered steel, and can be adjusted so as to exactly fit the concave of the discs. The scrapers are pressed against the discs and locked by pushing the lever with the hand or foot away from the operator and are released or unlocked by pulling the lever toward the operator. The scrapers attach to the gangs, not to the weight boxes, hence the Harrow can be used with or without weight boxes, as desired.

THREE-HORSE OFFSET

The Three-Horse Offset does away with all side draft when three horses are used abreast.

It is bolted to the short or rear part of the pole and extends to the right, the long pole being then bolted to the right-hand side of the offset; this brings the middle horse directly in the center of draft and no side draft results.

We furnish the offset for any of our disc harrows that are five feet or more wide, when ordered with Three Horse equipment.

WITH "CUT OUT" OR "CUT AWAY" DISCS

Any of our 16 or 18-inch sizes Star Harrows can be fitted with the "Cut Out" Discs.

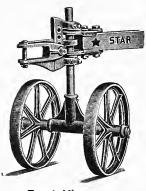
These Discs are made extra long, and the knife edge is beveled. They are so shaped as to cut or spade and leave the ground well cultivated with one harrowing. The cleaners can be adjusted to set as near the Discs as it is required to clean them, and the fingers on the cleaner bar can be adjusted separately.

This Harrow is the same in every respect as our Star Harrow, except the Discs.

To those who prefer this style of Harrow we can recommend it.

The Harrow can be fitted with Steel Weight Boxes and Fore Truck instead of Long Pole if wanted.

Star Disc Harrow (Continued)



Front View.

FORE TRUCK

This can be attached This illustration shows our "Fore Truck." to any of our Disc or Cut Out Disc Harrows.

The whiffletrees are attached to the Clevis on the Fore Truck. avoiding the possibility of any weight or bearing down on the horses' necks.

The Truck works on a swivel so that short turns can be made with it. It can also be raised or lowered.

This is a decided novelty and something new, and it is the consensus of opinion by those farmers who have used the Harrow with this attachment that they very much prefer it to the long pole, and would not be without it.

8	lize	Description	Width	No. Discs	Sizes Discs	Equip- ments.	Net Price Without Steel Weight Boxes	Net Price With Steel Weight Boxes	Add for Cut-out Discs
No.	1	 1-Horse	3 ft.	6	16 in.		\$21.25	\$22.25	\$1.00
44	2	Small 2-Horse	4 ft.	8	16 in.	2-Horse	23.50	24.75	1.25
**	3	Light 2-Horse	5 ft.	10	16 in.	2-Horse	25.75	27.25	1.50
**	4	2 or 3-Horse	6 ft.	12	16 in.	2 or 3-H.	28.25	29.75	2.00
**	5	Heavy 2 or 3-Horse.	7 ft.	14	16 in.	2 or 3-H.	30.75	32.50	2.00
"	6	Heavy 2 or 3-Horse.	8 ft.	16	16 in.	2 or 3-H.	33.75	35.50	2.50
"	7	2-Horse	5 ft.	10	18 in.	2-Horse	27.50	29.00	1.50
64	8	Heavy 2 or 3-Horse.	6 ft.	12	18 in.	2 or 3-H.	29.75	31.25	2.00
64	9	Heavy 2 or 3-Horse.	7 ft.	14	18 in.	2 or 3-H.	32.50	34.25	2.00
"	10	3 or 4-Horse	8 ft.	16	20 in.	3 or 4-H.	36.25	38.00	2.50
66	11	2-Horse	5 ft.	10	20 in.	2-Horse	30.75	32.25	
44	12	2 or 3-Horse		12	20 in.	2 or 3-H:	33.25	34.75	
44	13	3 or 4-Horse	7 ft.	14	20 in.	3 or 4-H.	35.50	37.25	
••	14	3 or 4-Horse	8 ft.	16	20 in.	3 or 4-H.	38.25	40.00	

No extra charge for three horse equipment.

Harrows with Fore Truck instead of long pole, \$4.50 extra; with both fore truck and long pole, \$6.00 extra. Fore truck only \$5.00.

The Cyclone Pulverizer and Roller

planting. Rolling meadows in spring of year. Breaking cornstalks in spring before plowing.

The only Steel Frame which will not twist or work at corners. The only Steel Bracket with necessary Weight and Strength.

The rolls or drums are made in one solid casting and of a superior grade of iron which will not bend or break. Each section is 18 inches long and 18 inches in diameter.

Roller-Bearing Hanger.

Is especially adapted for crushing lumps and pulverizing the soil. Rolling wheat ground after sowing. Rolling oats after coming up. Packing the soil in a solid bed. Rolling corn ground after



PRICES WITH ROLLER BEARING HANGERS:

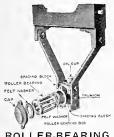
No. 3—5 Sections, 7½ ft. long, 1000 pounds\$33.00

PITTSBURGH PULVERIZER

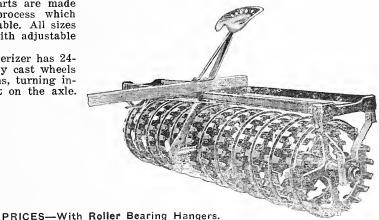
This is the best known crusher built; the teeth are straight, the sharp center rib acts as a wedge to break up the clods while the heavy prongs on each side of the rim crush the lumps. This makes an ideal tool, for extremely hard conditions of the ground. This machine having flat prong teeth also acts as a very good packer. The angle iron frame can be used as a weight box when more

weight is desired. The cast parts are made by the Coleman (semi-steel) process which makes them practically unbreakable. All sizes except the 6 ft. are equipped with adjustable

center hitches.



This Pulverizer has 24inch heavy cast wheels or sections, turning independent on the axle.



LER-BEARING HANGER

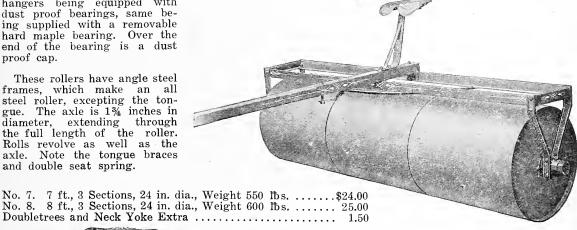
Length	Diameter	Sections	Weight		
7 ft.	24 in.	10	900		\$33.00
8 ft.	24 in.	.12			36.00
	Doubletrees and	Neckyoke extra		\$1.50	

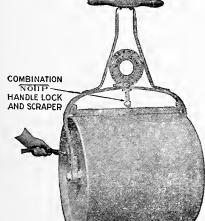
PITTSBURGH ALL STEEL LAND ROLLER

We here show our three section, 7 ft. and 8 ft. steel face rollers. They are 24 in. in diameter and roll full length on the surface. The drums are made of No. 12 high carbon steel, fitted with solid pressed steel heads. The Steel End hangers are securely bolted to the angle steel frame, the hangers being equipped with

dust proof bearings, same being supplied with a removable hard maple bearing. Over the end of the bearing is a dust proof cap.

These rollers have angle steel which make an all frames, steel roller, excepting the tongue. The axle is 134 inches in diameter, extending through the full length of the roller. Rolls revolve as well as the axle. Note the tongue braces and double seat spring.





Dunham Water-Weight Lawn Roller

This new roller of the "WB" type is fitted with a steel scraper which can be let down to ride on the drum, scraping off all grass, leaves or mud and leaving the roller clean. scraper can be thrown off the drum when desired.

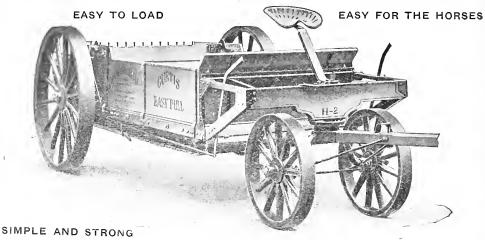
No-Tip Lock—This scraper can also be locked down tight against the drum holding the handle upright when not in use.

The round edge on Dunham Rollers will not tear up the grass, or mar the tennis court.

No.	Diameter Inches	Length Inches		Weight Empty	Filled with Water	Price
WB 3	14	20	1	65	200	\$ 9.90
WB 5 WB 7	$\begin{array}{c} 18 \\ 24 \end{array}$	$\begin{array}{c} -24 \\ 24 \end{array}$	$\frac{1}{1}$	- 80 115	$\frac{310}{500}$	$11.75 \\ 15.25$
WB 9	$\overline{24}$	$\overline{32}$	1	130	650	17.00

When filled with sand they weigh at least 50 per cent. more than with water.

The Curtis Easy-Pull Manure Spreader



THE HIGH WHEEL LOW-DOWN SPREADER

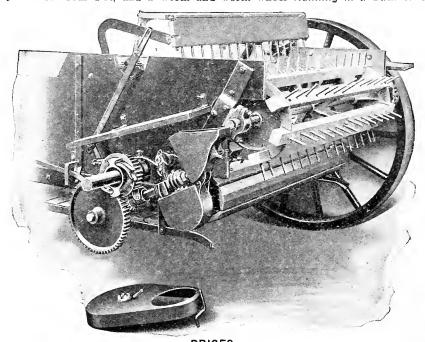
No pulverizer to prevent loading over the rear end. When spreading, end gate is raised and acts as a pulverizer.

DRIVE WHEELS UNDER THE LOAD. The axle and rear wheels of this spreader are well under the load and wheels are 50 inches high. The "Curtis Easy-Pull" is the ONLY HIGH WHEEL LOW-DOWN SPREADER WITH THE AXLE UNDER THE LOAD.

END GATE. The importance of an end gate in a manure spreader cannot be overestimated, for by this the manure is held away from the beater, and the beater is given a free and easy start out of reach of the manure. The beater attains full speed before the manure comes against it. This insures a good, even spread at the beginning and prevents a large bunch being thrown over at the start. It saves strain on the machine, and this end gate also makes the box of the spreader tight. The manure is not scattered along the road in going to the field.

The end gate of the "Easy-Pull" is jointed and moves away from the manure as it raises, so that it can never bind. POSITIVE GEAR FEED THAT CANNOT SLIP

FLOOR FEED. The positive floor feed of the "Curtis Easy-Pull" always spreads exactly the amount of manure that the driver sets it. This gearing is simple; two pairs of strong gears incased so as to be protected from dirt, and a worm and worm wheel Running in a Bath of Oil.



	PRICES.	
C-H1	40 to 50 bu. Capacity, Two Horse Hitch\$135	5.00
C-H-2	50 to 60 bu. Canacity. Two Horse Hitch	00.0
C-H3	70 to 80 bu. Capacity, Double Pole Three Horse Hitch 145	.00
	Brake \$6.00 Extra.	

Above Spreaders are equipped with steel wheels.
WRITE FOR CATALOGUE.

Excelsior Force Feed Lime and Fertilizer Sower

The most accurate and scientific machine on the market, embodying every desirable feature required for the broad-casting of Hydrated Lime, Carbonate of Lime, Dry Commercial Fertilizers, Wood Ashes, Marl and Nitrate of Soda as well as Calcium Chloride.



The Excelsior Sower is a machine well built and substantial. A wide range of quantities is possible with all fertilizers. The capacity of the machine is large, the draft light—as a result the work is rapid and well done.

The agitation of the material resulting in a Force Feed is entirely different from any other machine on the market. The direction of agitation is at right angles

with the combined movements and vibrations of the box and material in the machine when in motion. Free and even sowing is the result.

The Excelsior Force Feed Lime and Fertilizer Sower has a top that consists of a Screen and Lid attached by hinges and held closely by hooks. The insurance against trouble from foreign substances (of the machine) mixed with lime or fertilizer, causing great inconvenience and loss by breakage is of great value; a value perhaps most prominently shown in the use of unground lime and other substances that have not been ground or screened previously. Any objects small enough to pass through the screen will pass through the feeds when open.

Cold rolled high carbon steel used exclusively in our axles.

All feed openings at the bottom of the box are at all times curved whether small or large feed is being used. This does away with clogging trouble by small hard particles that would stick in a square opening, but will readily pass through a round or oblong hole.

Specifications covering No. 1—8 ft. machine:

Actual width of sowing, 8 feet, 3 inches. Capacity of hopper, 10 bushels.

Range of quantity, 150 pounds to 3 tons.

Throws out of gear from either wheel. Double lid on every Sower.

All hoppers supplied with removable screen.

Low 30-inch steel wheels with wide 4-inch tires.

Adjustable Scattering board.

No bolts. No gears. No cogs.

Rust resisting iron in each Sower.

Feeds instantly shut off or opened to any desired amount.

Steel braces for hoppers.

Automatic Agitator for damp materials.

Metal Sowing Dial with patented lever stop.

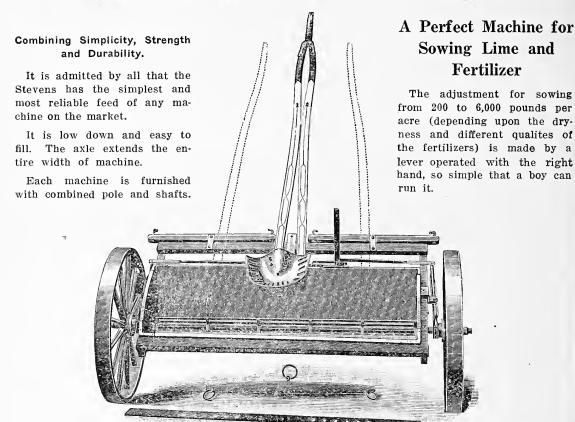
Felt washers incased in steel jackets to prevent dirt, etc., from working into the bearings at ends of 11/4 inch square feed shaft.

This illustration gives you an excellent view

This illustration gives you an excellent view of the arrangement of the double lid, removable screen, large hopper, force feeds and opening or outlets for materials being sown as well as the scattering board.

No. 1. Capacity 10 bushels. Sows 8 ft. 3 in. wide., \$35.00 Doubletrees, neckyoke, extra \$1.50

STEVEN'S FERTILIZER SOWER



It is light draft, even in soft land, as the wheels have tires four inches wide, also a ratchet hub which allows the turning of corners or completely around while in motion, or to back, without throwing out of gear.

The Stevens Fertilizer Sower has a reel-which runs the full length of the hopper and keeps the fertilizer in motion so that it is forced through the openings in the bottom plates. This kind of opening, it has been found, is the only pattern that will sow successfully all kinds of commercial fertilizers in large or small quantities.

The Row Plate, as shown in illustration, is used for distributing the fertilizer in rows and is sent out with both the 5 ft. 10 in. and 8 ft. 3 in. without additional charge. We furnish at small cost a third plate attached which is used to advantage when sowing small quantities. The latter can also be used to shut off the fertilizer at any time without making changes in the adjustment.

Combined Shafts with pole iron forming a pole as shown in cut is sent with each Sower, together with whiffletrees and neckyoke. We furnish a solid pole with neckyoke, evener and whiffletrees in place of combined pole when desired.

Covered Hoppers will now be furnished at a small additional price. This feature is much appreciated in using the sower on windy days.

Dropping Board is now furnished with all sowers which is not shown in the above illustration.

PRICES.

5 ft. 10 in. size, hopper holds 6 bu.\$43.00 8 ft. 3 in. size, hopper holds 9 bu.\$48.00 10 ft. size, hopper holds 11 bu.\$53.00

THOMASVILLE GROUND LIMESTONE

The use of Ground Limestone is not new, but has of recent years been called to the attention of farmers by the Department of Agriculture at Washington, and through all the state agricultural colleges and experiment stations. They all urge its use.

We claim that Thomasville Ground Limestone is the best on the market, on account of its unusual softness which makes it very soluble. Also because it runs uniform, never falling below 99 per cent. carbonates of lime. Write for sample and descriptive circular.

Carload—20 tons, or upward, in bulk, per ton, f. o. b. quarry, \$1.75. Carload—20 tons or upward, in sacks, per ton, f. o. b. quarry, \$3.25. Less than carload lots in sacks, f. o. b. cars, Pittsburgh. 100 lbs. \$.60 500 lbs. \$2.50 1,000 lbs. \$3.50 2,000 lbs. \$6.00

For further information regarding Thomasville Ground Limestone, see page 76.

If you will give us the name of your nearest Railroad Station we will quote you delivered prices in carload lots.

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MONITOR DOUBLE DISC GRAIN DRILL

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increases the yield-raises the Monitor Double Disc



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The Drill That Pays for Itse

Bigger Profits from Grain Crops. You are not making near all the money you can from your grain crops—if you are not using the Monitor Double Disc Drill. For example—with wheat it saves one-fifth the seed and increases the yield 3 to 7 bushels per acre. The increase with other grains is in the same proportion. Can you afford to lose that much on every acre every year?

Deposits Seed at an Even Depth. The Monitor sows in front of the bearing. Other drills sow behind the bearing. This particular feature of the Monitor gives it a very great advantage. The downward turn of the dises carries the grain into the ground and deposits it at the bottom of a clean, wide furrow, in two rows, one inch apart. Every grain is covered uniformly with moist soil.

Every Grain Grows. None of the seed is dragged to the surface to shrivel in the sun, or be eaten by the birds. Every seed germinates. Sow one-fifth less and still get a better stand than with the old style drills.

All come up at the Same Time. The proper placing of seed and unitorm covering with moist soil causes the grain to come up and ripen evenly—increases the yield and improves the grade.

Made in Double Disc, Single Disc, Pin and Spring Hoe, with or without Grass Seeder and Fertilizer Attachment.

Special circulars mailed on request.

PRICES WITH FERTILIZER AND GRASS SEEDER ATTACHMENT.

8 double disc, 8 inches apart.....\$108.25 10 double disc, 8 inches apart....\$126.00 11 double disc, 7 inches apart..... 133.00 9 double disc, 7 inches apart..... 116.50 10 double disc, 7 inches apart.....124.00 12 double disc, 7 inches apart....140.50

12 double disc, 8 inches apart\$142.75

HOOSIER GRAIN DRILL

The success of a grain drill depends primarily on the feed, the furrow openers, and the frame. The feed must accurately measure the quantity of grain wanted. The furrow openers must deposit the seed evenly and at a proper depth of germination. The frame must serve as the foundation for a drill and guarantee stability to the machine as a whole.

Hoosier Drills are equipped with the Hoosier Fluted Feed, the most accurate device for the measuring of all small grain like wheat, oats, barley, rice, flax, etc. Stock peas, navy beans, beet seed, alsike, alfalfa, millet, broom corn, kaffir corn, sorghum, and ensilage can be drilled. Light weight oats and similar seed are handled by using an agitator and high-speed sprocket.

Accuracy on the Hoosier is a foregone conclusion. With every revolution of the ground wheels, the shaft will make a certain turn. The fluted rolls, being pinned to this shaft and being the same distance in their cups, will measure an equal and certain amount per cup and the correct amount The flutes constitute a positive force feed that is unaffected by hilly ground. It should be noted, furthermore, that a beveled deflector in the feed cup causes an even flow of seed.

Simple, strong in construction, easily operated, and accurate in results, it is favorably known in all parts of the world.

Made in all sizes either in Pin Hoe, Spring Hoe, Single or Double Disc, 6, 7 or 8 inches apart, with or without grass seeder and fertilizer attachment. We lack the necessary space here to illustrate and describe the different styles, but will gladly send a full descriptive catalogue and prices on request.

THE GENUINE CYCLONE SEED SOWER

A Good Large Sower That Meets the Most Exacting Demands.

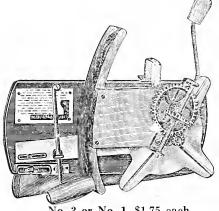
This machine is in a class by itself and stands out with individuality of perfection, having a slope feed board, and oscillating feed agitating device, an automatic feed adjustment, a non-solder joint, double

flange distributing wheel with interlock hub. The base is concave, which rests the sower nicely

against the side of operator in the most restful and easy position to carry and operate.

The material used in the construction of the Cyclone is of the best throughout. The hopper or sack has a capacity of ½ bushel. It sows with ease to the operator all varieties of grain and grass seed perfectly even.

Price, each \$1.75. Postpaid, \$1.90.



No. 3 or No. 1, \$1.75 each. Postpaid, \$1.90.

LITTLE GIANT No. 3

This Seeder Has Been on the Market for Many Years

Has a pressed tin, four flanged distributing wheel, and lathe centered gearings, making it a very easy running seeder. Accurate guage.

No. 1 Fiddle Bow Seeder, equipped with steel bow instead of a crank handle.

Force Feed!

Steel Frame!

THE YCLONE

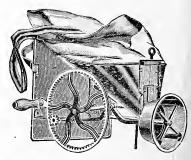
SEED SOWER

Hand Hold and Shield!

"THE CAHOON" SEEDER

The most accurate and durable Hand Broadcast Seed Sower. Sows all kinds of grain and grass seed. Is accepted everywhere as the world's standard. It is made of steel, iron and brass and lasts a lifetime. Every machine warranted.

Price \$3.75. Postpaid \$3.90.



Chain Feed Grass Seeder

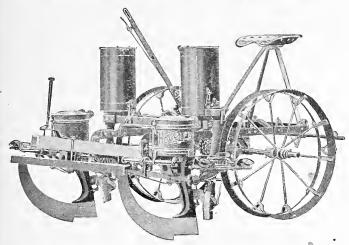
Price \$6.50.





This Grass Seeder has won for itself first place among all kinds of grass seeders. Most accurate and economical machine for sowing Clover, Timothy, Alfalfa and other small seeds broadcast. Runs easily, and sows evenly in windy weather. The quantity of seed sown is accurately governed by the wheel, which moves correspondingly slow or fast as the machine is run over the ground. It is instantly thrown out of gear, and the amount of seed sown is quickly governed by changing the pin in the index plate as thereon indicated. This seeder does not injure or bunch the seed, but evenly distributes it the full length of the hopper.

HOOSIER TWO-HORSE CORN PLANTER



Hoosier No. 10 Planter with Fertilizer Attachment

PRICES.

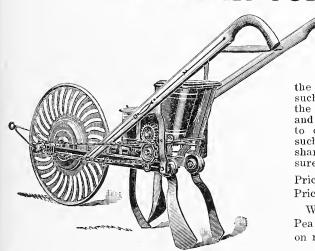
We do not consider it necessary to devote space or time introducing the Hoosier Line of Corn Planting Tools. They are well known to the farmers in every corn-growing locality of the United States. Their reputation is well established. Every year marks a large increase in the number sold, and today the word "Hoosier" on Corn Tools is accepted as indicating the standard of excellence in accuracy of planting and mechanical construction.

The Hoosier Two-Horse Corn Planters are furnished with or without Fertilizer Attachment, with or without Check Rower.

With this planter corn may be hilled or drilled and fertilizer may be drilled in rows or bunched in hills.

No. 10 Planter, without Fertilizer Attachment	\$37.50
No. 10 Planter, with Fertilizer Attachment	51.00
Check Rower Attachment for either of the above, extra	9.00
Doubletrees and neckyoke, extra	1.50

HOOSIER CORN DRILL



Our One-Horse Hoe Corn Drill is the most popular tool of the kind made, and is noted for its excellence and general good qualities. It is now made entirely of steel and iron, with the exception of the handles, and the material is distributed in

the handles, and the material is distributed in such a way as to give the greatest strength and the least weight possible. It is, therefore, strong and light. The material used is the best possible to obtain for the purpose. All wearing parts, such as the hoes, coulters, shoes and covering shares, are made from high-grade steel that insures the greatest possible amount of wear.

Price, with Fertilizer Attachment......\$16.00 Price, without Fertilizer Attachment.....\$14.00

With the "Reutzel and Frei" Depth Regulator, Pea and Bean Plate, extra \$8.00. Circular mailed on request.

WRITE FOR CATALOGUE GIVING DETAILED DESCRIPTION OF THIS PLANTER AND DRILL

Perfection Corn Grader

A seed corn grader has become a necessity in getting a uniform stand of corn.

No planter will drop uniformly unless the seed is graded.

No planter will drop uniformly unless the seed is graded. Graded seed insures perfect dropping, stronger plants and increases the yield 5 to 15 bushels per acre.

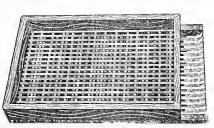
THERE ARE 4 GRADES OF CORN ON EVERY EAR.

- (1) The small kernels.
- (2) The large odd-shaped kernels.
- (3) The broad kernels too thin for good seed.
- (4) The even sized perfect kernels.

This grader sorts them out in one simple operation.

It has a special lower screen construction by which it gets Four grades of corn.

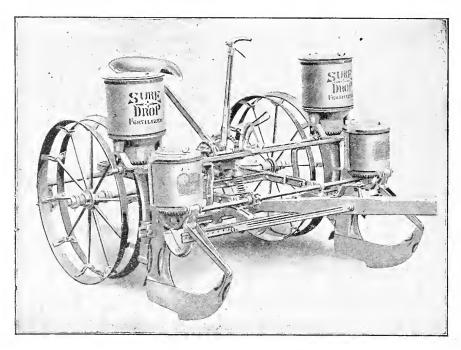
It has a guard on the lower screen to prevent the spilling of the corn while grading, and to enable all of the screen to act on the corn at once, thus making rapid work.



Capacity: 6 to 10 bu. per hr. Size 12x21 inches. Price \$1.25; postpaid \$1.35

Gale Sure Drop No. 5 Two-Row Corn Drill

With Edge Drop Plates



The Sure-Drop No. 5 Drill is a Two-Horse, Two-Row Machine for drilling corn, beans and other similar crops that are grown in drilled rows.

It is a strictly high-grade machine in every particular—as good as first-class material and skilled workmanship can make it. It is built almost entirely of steel and malleable iron, making it light, but especially strong and durable.

The Drill is adjustable to plant any desired distance between rows from 28 to 44 inches. Six pairs of seed plates—three pairs with "medium" and three with "small" cells—are regularly furnished, and these, in connection with the change of speed by means of a three-step sprocket wheel on the seed shaft, admit of nine variations of the distance apart that seed can be dropped, ranging from 6½ inches to 22 inches. A special sprocket can be furnished for dropping closer than 61/2 inches.

Wheels are furnished with either concave or open tire as desired.

PRICES.

No. 5—Without Fertilizer Attachment	\$34.00	
No. 5—With Fertilizer Attachment	45.00	
No. 53—Same as above with Round Hole Plates	1.50	less
Doubletrees and neckyoke, extra	1.50	

Gale Sure Drop No. 2 Hill and Drill Planter

The "Sure Drop" is a light, strong, durable Hill and Drill Drop Planter. The manner in which it is built insures perfect and accurate work. It is our latest and best planter, every detail having been worked out with a precision seldom equalled.

It has large hoppers, hand lever for raising the runners out of the ground, or holding them into the ground, adjustable pole and adjustable steel seat.

It is fitted with hinged hoppers so the plates can be changed without removing the seed, with a combined foot and hand device, and is adjustable to the following width between the rows: 3 ft. 2 in., 3 ft. 4 in., 3 ft. 6 in. and 3 ft. 8 in. The wheels are 30 inches high and are furnished with either concave or open tire as desired.

The Drop is of the Edge-Drop type, and is accurate in the dropping of seed. The cells of our seed plates are of such size and shape as each to receive but a single kernel of corn and hold it only one way-edgewise.

PRICES.

Without Fertilizer Attachment\$	39.50
With Fertilizer Attachment	51.00
Check Rower Attachment with Automatic Reel and 80 rods of Wire, extra	8.00

SPECIAL CIRCULAR GIVING DETAILED DESCRIPTION OF THIS DRILL AND PLANTER MAILED ON REQUEST.

Gale One-Horse Edge Drop Corn Drill

This cut illustrates the EDGE DROP Drill with fertilizer attachment. It will drill corn, peas and beans from 5 inches to 30 inches apart and, being equipped with Edge Drop plates, it will plant as accurately as can be done by hand. The fertilizer attachment is furnished with three different-sized cups and will sow all kinds of commercial fertilizer at the rate of 60 to 240 pounds to the acre.

It is the only machine of its kind on the market. The bevel gear which

actuates the seed plates is driven by a pitman strap attached to a crank arm on the covering wheel. The covering wheel has a wide concave tire and is 18 inches in diameter. An automatic scraper keeps it clean at all times, so the dirt will not stick to it.

The seed-hopper is large and furnished with a swinging lid held in place with a thumb-nut, allowing the seed plates to be changed without removing the seed from the hopper.

The plate is the vital part of this drill. The EDGE DROP plate is the most perfect plate yet constructed. The most important feature is the beveled portion whereby the kernels have to turn on edge when falling into the cells.

This is a patented feature and so important that other planter makers are constantly trying to adopt the Gale construction, in spite of the patents.

There is no plate yet made which handles the seed so gently as the Gale. No bruised or cracked seed can occur, and as a practical farmer you know that this means insurance of even stand and a saving of seed.

Special plates for sweet corn, pop corn, kaffir corn, broom corn, cane, sorghum, sugar beet seed, beans, etc., can be furnished.

The EDGE DROP Drills are recommended by all the State Agricultural Colleges.

Price complete with Fertilizer Attachment, \$15.00

The Eclipse All-Steel Rotary Hand Corn Planter

It eclipses all others, having a positive feed and four changes of discs.

Disc No. 1 is to drop ONE grain at a time.

Disc No. 2 is to drop TWO grains.

Disc No. 3 is to drop THREE grains.

Disc No. S is for seed or broom corn.

Price, \$1.50. Postpaid, \$1.70.

The Wiard Corn Planter

SIMPLE—DURABLE—ECONOMICAL

In this planter the seed is delivered from the dropper to the receptacle at the bottom, which, when opened by pressing over on the foot, leaves it at once at the depth required, avoiding the trouble found with all hand planters that deliver the seed direct from the dropper to the soil.

Price, \$1.75. Postpaid, \$1.90.



Wiard



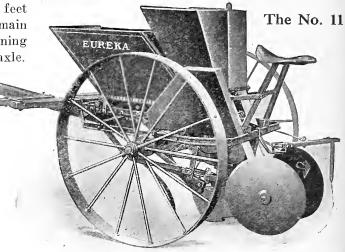
The Eureka Potato Planters

UNIFORM DEPTH Instead of being two feet or more ahead of the main axle, our furrow opening

plow is placed directly under the axle.

The seed hoppers and pits hold three bushels of cut seed. Each fertilizer hopper holds 150 pounds.

the light draft of the Eureka, as compared with other makes. Our No. 11 and No. 14 are equipped with strong steel wheels, 40-inch diameter, with 3½-in. tire. These unusually large wheels decrease draft, carry the machines more steadily over rough and uneven



fields, and prevent sinking into the soft earth of the fields. Both wheels drive.

EASILY The driver clearly sees the operation of the seed pickers and fertilizer **OPERATED** distributor and does not have to guess as to accuracy of the machine. All working parts are in plain view and all adjustments are easily and quickly made. The machine is automatic and requires only one man.

A specially constructed lever, without finger latch, is easily operated from seat.

ACCURACY The dropping mechanism of the Eureka is very simple, with a positive movement, and is unusually accurate. Frequent tests have shown it to be more than 95 per cent correct. Many users report 97 to 99 per cent. A planter with this high average satisfies growers and entirely offsets the old time argument made to sell planters which require a driver and an extra man to watch the seed dropper and supply the skips. The Eureka, with one man, will equal, if not surpass, the results obtained from any other style.

No. 14 Two Row, Two Horse, One Man Planter with Fertilizer Attachment...\$110.00

Prices without fertilizer attachment quoted on request.

If you are interested in potato planters write for special catalogue giving descriptions of the above machines.

EUREKA POTATO CUTTER

The Eureka Potato Cutter is the only machine made which will save the potato grower as large an amount of labor and eliminate so much of the unpleasantness and drudgery of cutting seed. It meets the requirements of the most exacting by cutting the seed uniformly in size and shape, producing a size that is approved by the most successful growers and saving the waste occasioned by the irregularity of hand cutting.

THE OPERATION

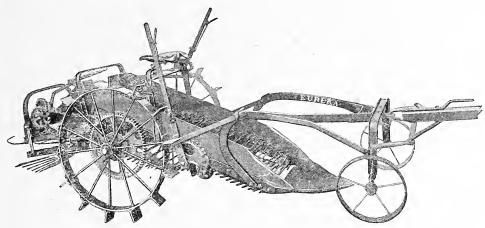
By operating with the foot, both hands are free for feeding. Three knives are placed crosswise, and one lengthwise, with spring

pressure guides on both sides, making a pocket into which the potato is easily placed in the position desired, and which centers the potato on the knives when the pressure block is forced down. There is an adjustable gauge which assists in properly placing different sizes of potatoes.

Price \$9.00



EUREKA POTATO DIGGER



No. 65-Eureka Potato Digger, 6 Foot Size, with Rear Shaker and Vine Separator

The No. 65 Eureka has large capacity and ample power for proper separation in heavy or light conditions. The frame is 22 inches wide and 6 feet long, the elevator being 5 feet long. Large ground wheels and main gears, by direct and uniform drive on each side of the machine, supply an unusual amount of traction and power. The rear shaker has an original vertical motion in addition to the oscillating movement. Stone shields are fitted to the idlers back of the shovel. Draw beams have wide spacing and unusual clearance above shovel, preventing weeds, etc., bunching and dragging.

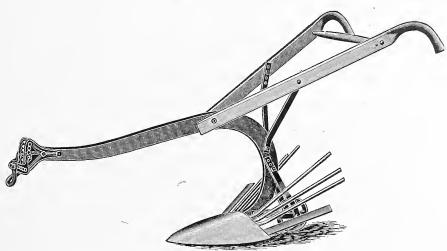
Long Life—Malleable iron and steel are largely used throughout the machine, making neat and strong construction, increasing the usual length of digger life and reducing delays in the field and repair cost to a minimum. There are no complicated parts. Each part is warranted to give proper service. This guarantee is based upon the result of nineteen years' Potato Digger experience.

PRICES.

Without Vine Separator\$97.50 With Vine Separator\$100.00

IF YOU ARE INTERESTED IN POTATO MACHINERY, WRITE FOR SPECIAL CATALOGUE GIVING DETAILED DESCRIPTIONS OF THE ABOVE MACHINE.

Pittsburgh Potato Digger



This Potato Digger has been in successful use for many years. It is equal to any ordinary requirements that may be made upon it. It will work where a good many higher priced Diggers will not work. If properly used it will not cut the potatoes and will also leave the ground in good shape. The depth of the Plow can be regulated with a gauge wheel bolted on the rear and which follows in the bottom of the furrow. The beam is made heavy enough to stand all ordinary strain. The handles can be adjusted up or down.

COLUMBIA PLANTERS

The Greatest Seeding Machines in the World

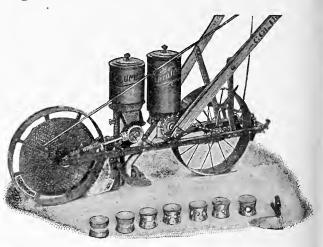
All of our machines have positive force feed. Every seed is carried to the ground and covered. Not a seed can escape, and not a seed can pass through the machine or escape to ground until the machine is in gear, and until it moves forward and is ready to do its work. Nor can a seed be shaken out, nor get to the ground when the machine is out of gear.

Any SEVEN cylinders that we make furnished with each machine at machine price, but any additional cylinders over the SEVEN, that are desired, will be 50 cents extra. We can make a cylinder to sow any seed desired.

Furnished either with flat or concave rear wheel.

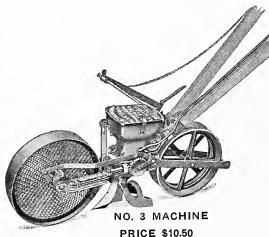
NO. 10 MACHINE

Price with fertilizer attachment.....\$15.00 Price without fertilizer attachment.. 10.50



No. 10 Machine with Fertilizer Attachment.

The accompanying cut represents our divided rear wheel, a new improvement on our latest machines. This divided wheel is very desirable in heavy clay soil, and especially where irrigation is practiced and the planting of seed sometimes done when the soil is wet. This divided wheel avoids forming a heavy, impervious crust above the seed, and yet firms the soil. By not having any hard crust over the seed it allows the seed to break through easily when it begins to grow. You can either have the flat rear wheel or the divided rear wheel at the same price upon stating the same when ordering.



THE STAR Garden Cultivator

An admirable tool for the garden.

The shape of the beam and its attachment to the wheel and handles, over and forward of the center of the wheel, gives it great power.

It is noted for its light draft and the great amount of work it will do.

Built of steel throughout, except the handles, which are of selected hardwood.

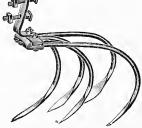
Price with attachments shown in cut \$3.10

5-Prong Attachment

New "5-PRONG" Attachment for "Star" Garden Plow. Can also be used on other makes of Garden Plows of same general type.

By means of this attachment you are able to cultivate the soil in proper manner and the weeds will have

absolutely no chance to sprout. The middle prong is often removed and rows straddled. No Ga rden Plow is complete without this attachment.





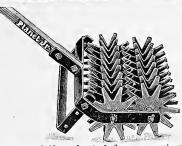


anet Jr. Garden Too



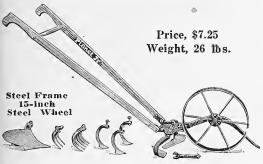
Planet Jr. Star Pulverizer. Leveler and Weeder

Price, \$3.50



This new tool is especially adapted for preparing the seed bed, and will be found of great value in smoothing and fining the soil surface. The rear blade is 13½ inches wide. After the crops are started, it may be used between rows as a weeder or as a crust breaker.

No. 16 Planet Jr. Single Wheel Hoe, Cultivator, Rake and Plow



These Single Wheel Hose are the highest type of their class. They have a great variety of attachments which adapt them to a large variety of work, and there is scarcely any garden cultivation they will not do.

Nos. 16, 17, 17½ and 18 have the same steel wheels, frames and handles, but the attachments sold with each vary.

The handles are adjustable in height. The frame is steel, convenient and strong with quick change device by which to exchange the tools without removing the nuts.

All attachments are of a special pattern, carefully tested by practical men; no others ever offered compare with them. All the steel parts are high carbon steel, oil tempered and specially hardened, finely formed, finished and polished and work to a charm. Everyone who cultivates needs one.

No. 17 Planet Jr. Single Wheel Hoe

No. 17 Planet Jr. Single Wheel Hoe

PRICE \$6.25. Weight 24 lbs.
You can do more and better hoeing with it in one day than you can do in three days with a hand hoe. The No. 17 has a pair of 6-inch hoes, a plow and a set of cultivator teeth, an outfit sufficient for most garden work. for most garden work.

No. 171/2 Planet Jr. Single Wheel Hoe

PRICE \$5.50. Weight 21 ibs.
This tool is identical with No. 16, except in equipment. The pair of 6-inch hoes, three cultivator teeth and leaf lifter which go with it, are all the finest of their kind.

No. 18 Single Wheel Hoe

PRICE \$4.50. Weight 19 lbs.
This has one pair of 6-inch hoes only—the tools that are most constantly useful throughout the season. Other attachments can be added as needed.

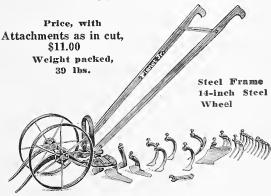
PLANET JR GUARANTEED GARDEN

TOOLS

They do the work of 3 to 6 men—quicker, better, cheaper. They put old-time methods "out of business" wherever used, because they can't compete with Planet Jr. labor-, time, and money-savers. Made light, yet strong and durable by a practical farmer and manufacturer with over 40 years' experience. . Every tool guaranteed.

We offer these Planet Jr. Wheel Hoes as the highest type of their class. They have a great variety of tools which adapt the implements to a large variety of work, and there is scarcely any garden culture of which they are not capable.

No. 11 Planet Jr. Combined Double and Single Wheel Hoe, Cultivator, Plow and Rake



double and single wheel hoe in one. Straddles crops till 20 inches high, then can be worked between rows with one or two wheels.

The hoes are wonderful weed killers and leave the ground almost level. The cultivator teeth are of improved design for deep work. The plows are invaluable for opening furrows for manure, etc.; for covering and for plowing to or from the crop. The rakes do fine cultivation and gather up trash. The leaf lifters enable close work when plants are large or leaves are flat on the ground. The greatest hand cultivating tool made. All steels are now hardened by a new process, giving longer wearing and easier running tools.

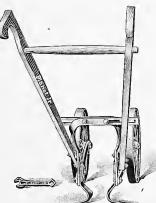
No. 12 Double and Single Wheel Hoe. PRICE \$8.75. Weight 33 lbs.

This tool is identical with No. 11 Wheel Hoe, except that it has one pair plows, one pair hoes, four cultivator teeth and a pair of leaf lifters only, and is sold at a correspondingly less price. The attachments sold with No. 12 are what gardeners use most, and the others can be added as wanted.

No. 13 Double and Single Wheel Hoe

PRICE \$6.00. Weight 28 lbs.

This tool is the No. 11, with 6-inch hoes only, these being the tools that are most useful.



No. 60 Planet Jr. Double Wheel Onion Hoe

PRICE, \$5.25

This new tool is a This new tool is a departure from alt previous Wheel Hoes. It is adjustable for the complete culture of onions, or general hoeing. The new allsteel hoes are a decided improvement over the bloom modern and the control of the complete in the bloom modern and the control of the complete in the bloom modern and the control of the control over the older models. We offer a special Onion Harvester for this tool.

Price, \$1.50

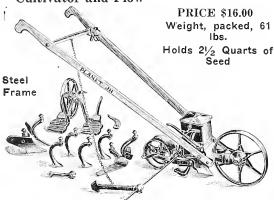


Planet Jr. Garden Too





No. 25 Planet Jr. Combined Hill and Drill Seeder, Double and Single Wheel Hoe, **Cultivator and Plow**



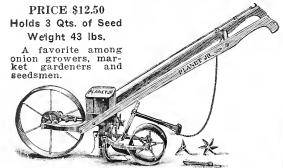
This combination is intended for gardeners who have a large enough acreage in crops for a double wheel hoe to be used to good advantage, and yet prefer not to buy seeders and wheel hoes separately; and for the family garden where a double

ately; and for the family garden where a double wheel hoe is preferred.

As a seeder it is practically the same as the Planet Jr. No. 4, and as a wheel hoe has the same steel frames and cultivating attachments as the Planet Jr. No. 12 Double Wheel Hoc.

Two acres a day can easily be worked, and when it is done, it will be a better job than several men could have done in the same time with hand hoes.

No. 3 Planet Jr. Hill and Drill Seeder



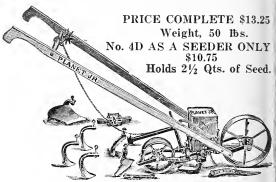
The 15-inch driving wheel is steel, with heavy forged spokes, making the tool light and easy runsteel, with heavy ning.

The opening plow is V-shaped, adjustable for depth, leaving the seed in a very narrow line, making close cultivation easy. The index is in plain view at top of handles and graduated for hills or drills.

The flow of seed is instantly started or stopped by the cut-off rod. No seed wasted at ends of rows. Sows in large or small quantities in drills or in hills, 4, 6, 8, 12, 24 inches apart. Force feed. The coverers, roller and marker are of size and design found most satisfactory by professional gar-

The New "PLANET JR." Catalogue is the handsomest, best, and most instructive book ever issued on a similar subject. Full of little points that bring profit. of true and handsome illustrations. mail it free to any address on application.

No. 4 Planet Jr. Combined Hill and Drill Seeder, Wheel Hoe, Cultivator and Plow



This accurate, durable and easy-running tool sows all garden seeds from the smallest up to peas and beans in hills 4, 6, 8, 12 or 24 inches apart, or in drills at the proper thickness and depth; rolling down and marking out the next row all at one passage. No time is lost. No seed is wasted. Pays for itself in a season and will last for years. Thousands have been sold in this and many foreign countries. countries.

> No. 31 Planet Jr. Combined Drill Seeder and Single Wheel Hoe

Price, Complete, \$8.50 Packed Weight, 30 lbs. No. 32, as a Drill Seeder Only, \$6.00

Transco This new tool is of great value to gardeners who have never felt able to own either a seed drill or a wheel hoe. It will sow even a small packet of garden seed with great precision. Quickly changed to a splendid wheel hoe. A special machine for the

We are Headquarters for Planet Jr. Tools Come get yours.





Planet Jr. Tools

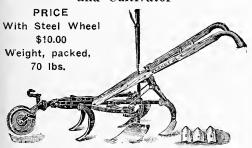


No. 8 Planet Jr. Combined Horse Hoe and Cultivator



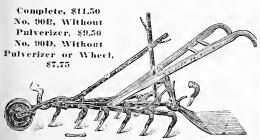
No other cultivating machine is so widely known as the Planet Jr. Combined Horse Hoe and Cultivator, for it is in use throughout the civilized world. It is so strongly built as to withstand incredible strain, yet it is light and easy to handle. It opens and closes furrows. hoes right up to the plants without danger of injuring, throws dirt to or from the row and throws back from center again. You can cultivate to any depth desired, and adjust for any width.

No. 9 Planet Jr. Combined Horse Hoe and Cultivator



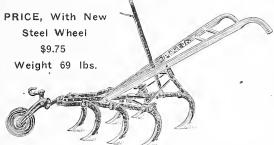
This Horse Hoe is identical with No. 8, except that it has no depth regulator and a plain wheel instead of lever wheel. It has the high frame, patented hollow steel standards, steel wheel, patent lever expander, and hollow steel wheel arms.

Planet Jr. Twelve-Tooth Harrow, Cultivator and Pulverizer



Gardeners cultivate better than formerly. It has been found to pay best. With the Twelve-Tooth Harrow you go as deep or shallow as you like, come up close to row without injuring plants, cut out all the weeds, stir the soil and mellow and fine it as with a garden rake. You widen and narrow as you please between 12 and 32 inches. It's a special favorite with strawberry growers, market gardeners and gardeners and truckers.

No. 83 Planet Jr. Seven-Tooth Cultivator



This cultivator is particularly pleasing, as the extra number of teeth widens the cut to 30 inches. The arrangement of the teeth prevents open furrows next to the row and puts the ground in beautiful shape. For finishing a middle at one passage, it is superior to a five-tooth machine. Every part is perfected to make the tool acceptable to the intelligent farmer who knows the best is always the cheapest.



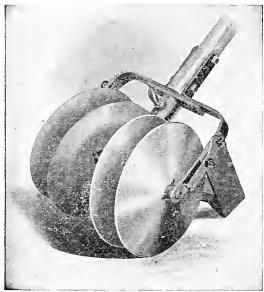
This admirable tool is the very latest. The expander lever, instead of standing perpendicular, slants backward between the handles, so it can't get bent or broken, and won't injure crops under cultivation. Its weight adapts it particularly to use in light land, but it is strong enough for use anywhere, and is so simple in construction and has so few parts, it can't get out of order. The cultivator teeth are made of high carbon, beveled steel, and will retain their shape. The turning shovels are of special design, of elegant proportion and useful in connection with the shovel steel in throwing furrows, and afterwards covering them, and for plowing and hilling much or little as desired. All steels are specially hardened so they will last a long time and scour anywhere. Different width steels, sweeps and furrowers can be added.

No. 103, with plain wheel in place of lever wheel, \$8.25



FREE! An Instructive 72-Page Illustrated Planet Jr. Catalogue. Write for it, or come and see the Implements

Perfection Garden Cultivator



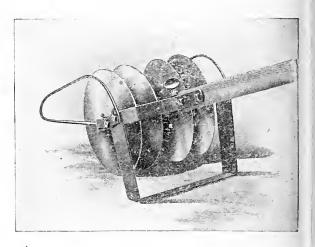
The Discs can be adjusted to any angle, throwing the soil to or from the plants.

For thirty years a satisfactory hand cultivator has been sought for; improvements, combinations and auxiliaries have been added to the older makes without resulting in complete satisfaction. In this new weeder, however, the defects have been overcome and satisfactory work is the result.

The two photographs show it complete. It is simple, durable, made of the best material and within the reach of all in price. It is adjustable to different angles, each change adapting it to different modes of work. Different soils require different adjustment, and dry weather needs a deeper mulching than when the ground is moist.

Perfection at last. This New Disc and Knife Weeder and Mulcher is the final evolution in hand Cultivators. It excels and supersedes all. In it is found the best characteristics of others simplified to the accommodation of the professional trucker or home gardener. A child can work it. It has no attachments and no encumbrances, is complete in itself. It does the weed killing, cultivating and mulching at one process. This is something that no other cultivator accomplishes. It is a perfect hand cultivator.

No attachments are necessary to make it do the work needed By a simple changing of the bolts it automatically adjusts itself to suit the occasion. It can be worked in gravel soil, through sticks and coarse straw or stubble of any kind. In stony land it works as well as in the softest loam.

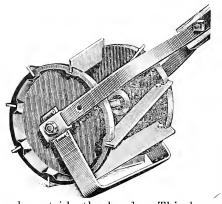


Perfection Garden Cultivator is made in two sizes, Viz., No. 1-With two discs, on which 6 in knife is used

No. 2-With four discs, on which $8\frac{1}{2}$ in. knife is used.

PRICE, EITHER SIZE, \$3.50

The Barker Weeder, Mulcher and Cultivator



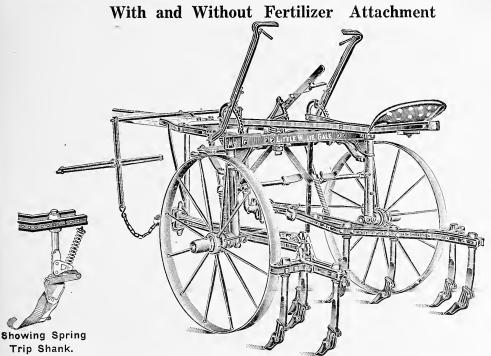
Should be in everyone's Garden. Easy to operate. Self-adjusting. A time saver. One man with a "Barker" can do more work, do better work than ten men with hoes. It Cultivates and Pulverizes the soil, forming a soil mulch, which prevents evaporation, thus conserving the moisture, holding it in the soil for the use of the growing plants.

The construction of this little machine is very simple. There is nothing to get out of order, nothing complicated about it. It has a revolving reel holding eight spring steel blades securely fastened at the ends in cast iron heads. Below this reel is a steel knife with ends turned up and connecting with the

axle outside the heads. This lower knife passes below the surface of the ground, where it cuts off all the weed roots, while the revolving reel working in combination with it cuts up the soil, separates the dirt from the weed roots and forms a perfect soil mulch.

No. 10D. Will weed and mulch a strip 10 inches wide Price 7.00

LITTLE WILLIE RIDING CULTIVATOR



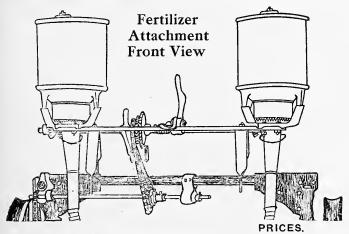
The Little Willie Cultivator is the most up-to-date and satisfactory implement of its class on the market today. It will be found especially satisfactory in localities where narrow row crops are planted—potatoes, beans and tobacco. It can be narrowed down to cultivate successfully crops planted as close together as 28 inches.

We have incorporated in the Little Willie the thoroughly tested pivot axle construction, in use

for several years on our Pivot Axle Cultivators. We use the well-known drawn-in hitch feature, where-

by the draft of the team draws the gangs into the ground, assuring an even depth of cultivation. The gangs are pivoted to the front on cone couplings and are controlled by the shifter bar attached to the pivoted to the front of cone couplings and are controlled by the shifter bar attached to the pivoted standards and are governed entirely by the feet. With the center lever the operator can instantly and without stopping bring the gangs together or set them out. A device on the shifter bar enables the operator to lock the frame, making it rigid. The pole is equipped with the patent pole adjustment whereby the frame of the cultivator is kept level, regardless of the size of the team. The extension gangs are made of two bars of high carbon steel, the shovel standards are attached between the bars and the holes therein make it possible to set them as close together as may be desired. together as may be desired.

The shovels are double pointed and can be reversed, giving twice as much service as the shovels usually furnished. The wheels are low and very strong, equipped with dust-proof hubs.



FERTILIZER ATTACHMENT

It is conceded by all practical agriculturists that a small amount of fertilizer applied at different periods during cultivation is much more effective and will produce a larger yield of corn than a large amount applied at planting time.

This attachment can be attached to any Gale, Little Willie or Blg Willie Cultivator.

The increased yield resulting from its use will soon pay for the attachment.

Without Fertilizer Attachment

6 Shovel Pin Break\$32.00 8 Shovel Pin Break 32.50 6 Shovel Spring Trip 34.50 8 Shovel Spring Trip 35.50

Fertilizer attachment, separate, \$13.00

With Fertilizer Attachment

 6 Shovel Pin Break
 \$44.00

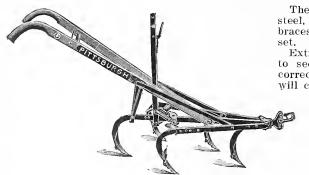
 8 Shovel Pin Break
 44.50

 6 Shovel Spring Trip
 46.50

 8 Shovel Spring Trip
 47.50

Above prices include Shields, Hillers and Bull Tongues. Disc Hilling Attachment extra \$3.50.

Pittsburgh Cultivators



The Pittsburgh Cultivators are made of round-edge steel, and are highly finished. The outside stay braces hold the frame solid to any width it may be set.

Extra care is taken in the "setting" of the shovels to see that they "face" the work properly, have correct "pitch" and are evenly spaced so that they will cut all the ground.

Pittsburgh 5-Tooth Cultivator

With Adjusting I	ever			 			. \$4.0	0
Wheel Extra				 			5	55
Horse Hoes extra		 		 			8	35

Pittsburgh 5-Tooth Cultivator

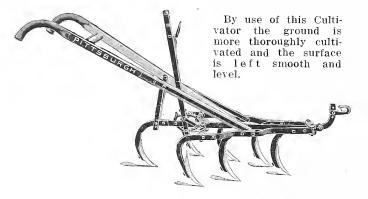
Horse Hoes for 5-Tooth Cultivator



With Hand-Wheel Adjustment \$3.50 Wheel Extra .55 Horse Hoes extra .85

Pittsburgh 7-Tooth Cultivator

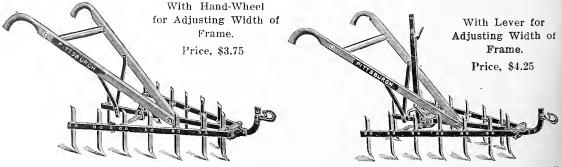
Price with Lever\$4	4.50
Price without Lever	1.00
Wheel Extra	.55
Horse Hoes Extra	.85



Wheel for 5-Tooth Cultivator



Pittsburgh 14-Tooth Cultivators



The teeth can be adjusted to different angles. They are made of the very best "hard steel," with one end shaped for cultivating, while by reversing them the tool can be used as a Harrow.

Wheel for either of the above, extra, \$0.55.

PITTSBURGH SHOVEL PLOWS

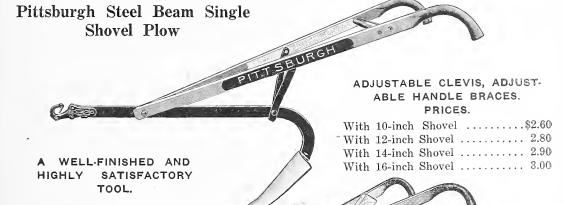
Pittsburgh Steel Beam Double Shovel Plow PITTSBURGH Price, \$2.60 Shovels have proper pitch for Beams Made of Solld Steel Rolled, Tapering at Point.

entering ground right, and making Steady Running Plow.

> Pittsburgh Steel Beam Triple Shovel Plow Price, \$3.50



The Triple Shovel Plow is an excellent tool for the cultivation of corn and potatoes, or anything that is planted in rows, and is adapted to the wants of both the farmer and gardener. By its use the entire surface of the ground is plowed and still left smooth and level.



PITTSBURGH

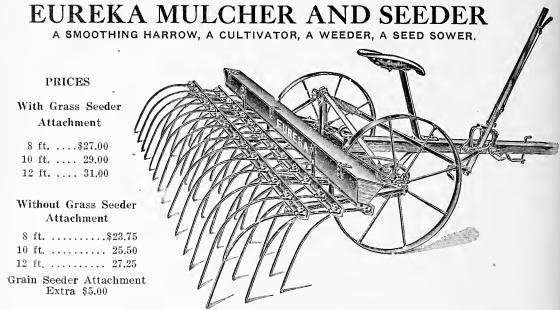
For hilling potatoes and other similar work this tool will be found highly satisfactory. The wings are adjustable by means of the punched straps or braces that support them, and they can be set to any desired angle.

Price, \$2.80.

Pittsburgh Wing Shovel Plow

NO WELDS.

Width of main shovel is 12 inches, and with wings extended to limit 12 makes a total width of 26 inches.



The Sulky being ahead of the teeth, insures no wheel marks, a handy spring tension lever raises the cultivator head from the ground, also controls the depth of cut of teeth. For leveling the ground, pulverizing the soil, and preparing a good seed bed, the Eureka Flat Tooth Cultivator has no equal. This Cultivator is far superior to the spike tooth smoothing Harrow, as it cuts wider, it cuts the ground more closely, and is easier draft; the depth of cut is under the control of the operator, the head can be raised to clear the teeth of trash and the driver rides.

As a Weeder the Eureka is very efficient. The frequent use of the Eureka during the growing season will give a large increase in the yield of corn, potatoes and other crops.

The Seeder Box can be quickly attached or detached. Adjustments can be made to sow a variety of quantities. The teeth cover the seed thoroughly, either shallow or deep. Will sow from 2 to 20 quarts of grass seed per acre.

If used on old meadows, new seed can be applied at the same time the old grass is thoroughly

cultivated, insuring a large increase in yield.

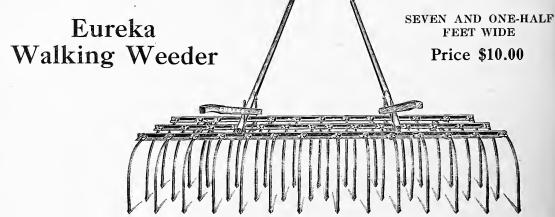


The 3 ft. one horse size is for cultivating and seeding between rows. Teeth cover the seed and level the field same as the larger sizes.

The practice of seeding over crops between rows of corn, cotton and other crops has been quite generally adopted in many states.

It will handle crimson, red or alsike clover, alfalfa, timothy, millet, rape, turnip, rye, oats, buckwheat, etc., in various amounts desired.

Without Grass Seeder Attachment......\$10.50 With Grass Seeder Attachment...... 15.25 With Grass and Grain Seeder Attachment..... 18.00



The Eureka Walking Weeder is equipped with flat teeth, which are more effective than the round or partially round styles and make a thoroughly successful weeder. The Eureka flat teeth are especially adapted for forming dust mulch, as they cover more of the surface of the soil than teeth with round points.

The Frame or Head of weeder is angle steel, to which the teeth are attached by properly designed clips. Teeth can be removed from any part of the frame, as may be desired, to work only between rows. The shafts and handles are adjustable to various heights of horse or man.

HARVESTING MACHINERY

We have space to describe but a few of our harvesting tools. If you are in the market for a Binder, Mower, Rake, Tedder or any other harvesting machinery, write us for special catalogue and prices. Our line is complete and our machines are guaranteed.

Adriance Binders and Mowers

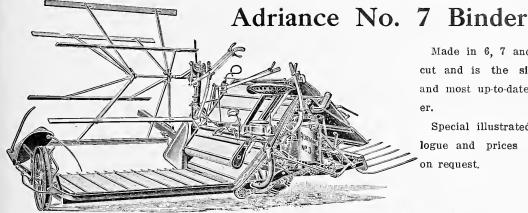
We have sold the Adriance Binders and Mowers for the past 27 years and do not hesitate to recommend them as equal to, and in many respects, superior to all other makes.

Investigate before buying and you will have but one choice—ADRIANCE BINDER. Considered

by those who know to be the surest tying and the simplest knotter made—no toggles or delicate parts to get out of order. Any boy can adjust an Adriance knotter. Only one set screw to tighten or loosen as the case may be.

Binder is driven direct from gear shaft. Chain has nothing to do but drive the binding parts. No extra strain on the elevator chain, which means no chain trouble.

Rollers have self aligning boxes which always run free no matter what position.



Made in 6, 7 and 8 ft. cut and is the simplest and most up-to-date Bind-

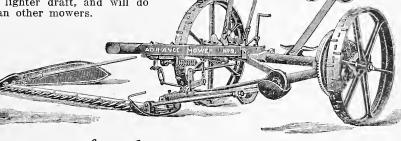
Special illustrated catalogue and prices mailed on request.

Adriance No. 8 Mower

Made in 41/2, 5 and 6 ft. cut.

The Spring hitch relieves the jar on the horses; crank shaft has bronze bearings; knife always in line; steel bearing plates for knife; no broken knife heads. The Adriance mower is of lighter draft, and will do cleaner and better work than other mowers.

Special catalogue and prices on request



Adriance No. 10 Mower

Adriance No. 10 Mower. Made in 31/2 and 4 ft. cut. The onehorse mowers are much used on golf courses and large lawns, cutting closely the short, soft grass and giving in such work the same satisfaction that they give in the hay field.

Adriance Machines give the best service for the longest time at the least expense. They are the Simplest and best proportioned, the most convenient in use, and the Lightest in draft. PRICES ON REQUEST.

Hocking Valley Steel Tedder

The Wheels are very heavy and have abundant strength to stand in any territory.

The Draft Frame and the tedder frame are connected by two steel springs one on each side, which act as a sort of cushion to the tedder frame, counteracting the jar and motion caused by the rapid action of the forks. The machine is thrown in and out of gear, even while at work, by means of an upright lever within easy reach of the driver.



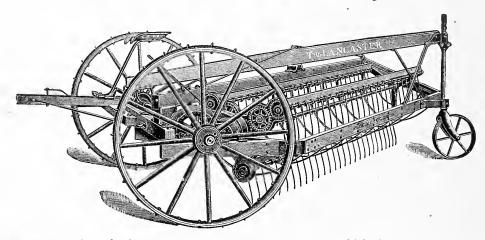
The six-fork tedder is furnished with combination pole and shafts, and the eight-fork tedder with pole, doubletree, singletrees and neckyoke.

PRICES.

6 Fork Tedder\$36.00

8 Fork Tedder\$41.00

The Lancaster Side Delivery Rake



In the construction of The "Lancaster" Side Delivery Rake, which is comparatively new, we have combined all the good points, and avoided all the faults of those that have gone before. It is simple, durable, well made, easily operated and perfectly satisfactory in its work. It gathers up the hay, free from dust and dirt, into a continuous, loose and fluffy windrow, through which the air freely passes.

In capacity, it is equal to any rake of the kind made, and greater than most of them.

PRICE, \$48.00.

Hocking Valley Hay Loader

The Hocking Valley Hay Loader is carefully and thoroughly constructed from the very best selected material and is guaranteed to do its work as well as any loader made, and with less draft than any other.

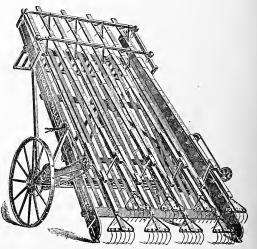
It is so nicely balanced on the axle that it is neither top-heavy, nor do the teeth drag on the ground with unnecessary weight. It is acknowledged to be the lightest of draft of any loader made.

It is intended principally as a swath loader, but will work with equal satisfaction in windrows that are not excessively large. In fact where the hay is light it is better to rake it in small windrows first.

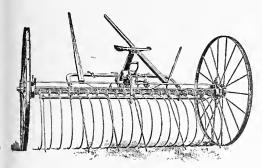
It is furnished with wood wheels made of the best seasoned hickory, and they are as strong and durable as wagon wheels.

Wherever the name Hocking Valley is known, that is sufficient guarantee of the qualities of the loader, and that in construction, material and finish it is without a rival. We make but one size, eight feet wide.

PRICE, \$56.00.



Hocking Valley Steel Champion Rake



The Hocking Valley Steel Champion Rake has been designed, constructed and finished with a view of making it the best sulky rake offered to the trade.

It is a **Self-dump** rake, in which the labor of discharging, as well as gathering the load, is done by the horse.

The shafts can be changed into a pole for two horses easily and quickly.

There are no springs of any kind on it to become weak and get out of order. It produces no jar in dumping.

The vibrating cleaner rods lie on top of the windrow, and by their weight keep it compact, and enable the rake to gather the hay by pushing it along, not rolling it. Thus, when the dump is made, the hay is turned bottom side up and the damp part exposed to the wind and sun.

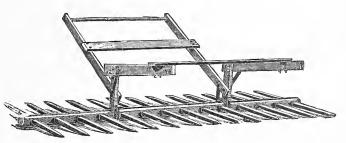
PRICES.

8 ft. with 20 teeth	\$24.00	9 ft. with 24 teeth	\$25.00
	10 ft. with 26 teeth	\$26.00	

The Huber Revolving Hay Rake PRICES.

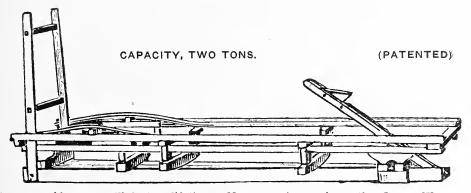
14 Tooth, 8 ft.....\$7.75 16 Tooth, 9 ft......8.25

18 Tooth, 10 ft...... 9.00



It is the most practical rake in use, and is made of the best selected hardwood timber, thoroughly seasoned. The teeth are square and are framed in the heads perfectly solid, thus giving them more strength and making them less liable to come loose and break, and enabling them to gather the hay better than a round tooth rake.

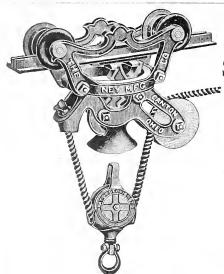
The Standard Hay Rack



With reasonable care will last a lifetime. No cross-pieces above the floor. Wagon can turn short, front wheels turning under the rack. Ladders fold down when not in use, front ladder making a spring seat. Material, clear red elm, securely bolted, %-inch steel bolts being used in its construction.

Shipped "knocked down." Can be set up in thirty minutes, the only tool required being a wrench.

Furnished at the above price to fit either 38 or 42 inch bolsters. In ordering be careful to state width of bolsters,



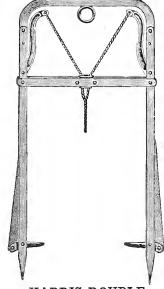
NEY HAYING TOOLS

Swivel Reversible Carrier for Double-Angle Steel Track No. 5

This Carrier has been on the market so long and has met with such high favor that much comment is unnecessary. It cannot pass the bumper or trip block while in operation, and is easily and quickly reversed from the floor. It is constructed entirely of malleable iron; travelers and sheaves revolve on turned steel bushings, making it the easiest running and most durable carrier on the market.

The Genuine Nellis Fork

Made of extra quality material and finely finished. The best made Nellis Fork on the market.



HARRIS DOUBLE HARPOON HAY FORK

PRICES

No. 5 Swivel Reversible Carrier	\$5.00
Nellis Single Harpoon Fork	2.25
Harris Double Harpoon Fork	1.50
Double Angle Steel Track, per foot	.15
Open Track Eyes, each	.10
Steel Crimped Rafter Brackets, each	.05

PULLEYS

No. 111—All wood, 5 in. sheave, swivel eye for 1 in. rope

or smaller, each\$0.3	35
No. 112—Same as the No. 111 with open swiveling hook instead of solid eye for 1 in. rope or smaller, each .3	35
No. 114—Iron frame, 6 in. wood sheave, swivel eye for 1 in. rope or smaller, each	
No. 115—All iron, 5 in. sheave with swivel eye for \% in.	
rope or smaller, each	5U

No. 118—Iron frame, 6 in. wood sheave with swivel eye

ROPE

	Size $\frac{1}{4}$ in.	$\frac{3}{8}$ in.	$\frac{1}{2}$ in.	$\frac{9}{8}$ m.	3/4 m.	% III.	1 in.
Manila, per ft	$\$0.011/_{2}$	$\$0.01\frac{1}{2}$	$\$0.02\frac{1}{2}$	\$0.04	\$0.05	$\$0.07\frac{1}{2}$	\$0.09
Sisal, per ft		$.01\frac{1}{4}$.02	$.031/_{2}$	$.04\frac{1}{2}$	$.06\frac{1}{2}$.08
	mplete outfits						

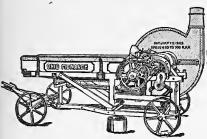
Grain Cradles

Prices on Wood Track Outfits will be quoted on request.

Westmoreland Hand Made	each	\$6.25
Schwob Champion	each	4.25
Extra Fingers—Oil Sprung	each	.15
Hand Made Fingers	each	.35

Ohio Ensilage and Fodder Cutter

"Ohio" Monarch Self-Feed Silo Fillers With Blower Elevator



Made in Five Sizes—With 12, 15, 17, 19 and 22-inch Knives.

WONDERFUL SELF-FEED—The "Ohio's" strong, sure, positive, bulldog grip feed rollers are famous. A single lever gives operator instant control of entire feed. An eight-foot traveling table and a wide extension mouth-piece save labor and

prevent accidents.

The fan surface on the ordinary cutter is very limited compared with the "Ohio," and even if able to cut at the same enormous speed, the blower would be incapable of taking care of the cut product. The "Ohio" fan blade surface and the size of the fan case are much greater than on any other machine, and a ten-inch pipe is required to take care of the silage.

Prices and catalogue mailed on request.

Nos. $8\frac{1}{2}$ and $10\frac{1}{2}$

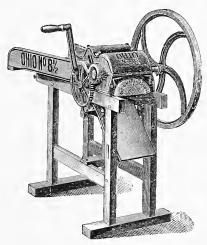
Capacities—One man can easily cut a bushel of hay with No. 8½ in 40 seconds, and with No. 10½ in 30 seconds, and a boy 12 years old can use them successfully.

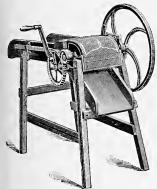
Lengths of Cut—With one knife, cuts $\frac{1}{2}$, 1, $\frac{1}{2}$ and 2-inch lengths. With two knives, cuts $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ and 1-inch lengths.

SIZES AND PRICES

SIZES AND PRICES
No. 8½K1—"Ohio" Hand Feed Cutter, with one 8½ inch knife; for hand use only; weight, 165 lbs
No. 8½ K2—Same machine, equipped with two
knives 20.00
No. 10½K1—"Ohio" Hand Feed Cutter, with one
10½-inch knife; for hand use only; weight,
180 lbs
No. 10½ K2-Same machine, equipped with two
knives 24.00
Pulley for power—8 or 10-inch diameter by 3-inch
face, with bolts to attach to fly wheel (8-inch
diameter furnished unless otherwise speci-
fied). EXTRA 1.25

Descriptive catalogue and prices of power cutters sent on request.





"Pony" Hand Feed Cutter

Strong, but Light Running—This cutter is for hand use, but is strongly constructed and light running.

Points of Advantage—Being nicely balanced, and having a minimum number of mechanical parts, means that it turns easily and is not hard on the user. These points should be looked into carefully, when considering the purchase of a machine of this class.

Lengths of Cut-Cuts from 1/2 to 2 inches.

No. 783—"Pony" Hand Feed Cutter, with one 11¹/₄-inch knife; weight, 170 lbs., price\$12.50

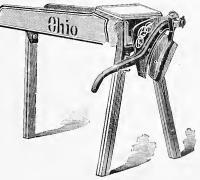
Pulley for power—8 or 10-inch diameter by 3-inch face with bolts to attach to fly wheel (8-inch diameter furnished unless otherwise specified) EXTRA

"Ohio" Lever Cutter

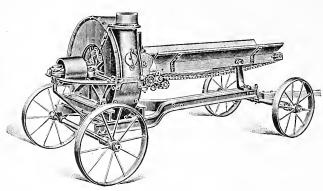
One Size and Well Known—This machine is made only in one size, and it is so well known that little or no description is necessary. The knife is oil-tempered, sickle shape and 11 inches long.

Adjustment to Knife Lever—The knife lever has a nice adjustment to the cutter bar, which gives the user assurance of a perfect shear cut at all times.

Gauge Plate—A gauge plate is provided for this machine, which has ready adjustment, and thereby giving various lengths of cut up to 2 inches. It can be removed at will.



DESCRIPTIVE CATALOGUE AND PRICES ON OTHER SIZES MAILED ON REQUEST



Hocking Valley Ensilage and Fodder Cutter

Made with 9, 11, 13 and 15 inch throat. Self Feed Table and Silage Deflector, Mounted and Unmounted.

This Blower is so compact, so simple in construction and so free from machinery and complicated parts that its merits are recognized on sight. Excepting the ground sill it is made entirely

of metal. It consists simply of a heavy iron disc or balance wheel to which are attached the knives and fan blades, and these are enclosed in a circular iron drum or case. These with the feed rollers and main shaft on which the balance wheel revolves, constitute

practically the whole machine.

The manner of attaching the knives to the balance wheel calls for special mention. They do not shear, as in other similar cutters, from the inner end towards the outer end of the shear bar. On the contrary the knives are so set that they first meet the shear bar at its outer end, when the momentum is greatest and where the work is hardest and shear towards the inner end, as the momentum diminishes and the work decreases. The importance of this construction in saving of power cannot be overestimated. We furnish 2 knives regularly, but 4 may be used at an extra cost of the 2 knives.

The knives are adjusted, accurately, and in the simplest and easiest manner possible,

by a special patent device of our own.

In addition to the knives, we furnish Splitters, when desired, so the material may be shredded as well as cut. They are extra, but are sometimes wanted when it is intended to mix the material with mill feed.

We call particular attention to the I-beam base, which adds special strength and

rigidity to the frame.

Special Circular and Prices on Request.

ECONOMY DISTRIBUTOR

PUTS THE ENSILAGE WHERE YOU WANT IT EVERY SILO OWNER NEEDS ONE

You will have better ensilage if you use an Economy Distributor in filling your silo.

It assures a better pack. Leaves, moisture and heavier parts are uniformly mlxed, air is excluded and even settling results.

The exclusive construction of the Economy Distributor makes it almost as flexible as a rubber tube. The flow can therefore be directed to the outer edge of the silo as is desirable to secure even distribution, the pressure always forcing the ensilage toward the center.

The Economy Distributor consists of a series of 26-gauge galvanized steel conical cylinders 34 inches long, 10 inches across at the top and eight inches across at

the hottom

These are coupled by short chains on opposite sides. The top section is 24-gauge and is about two feet long, 18 inches across at the top and nine inches across at bottom. The flaring top is placed close under the end of the hood on the blow pipe. The other end is controlled at will by the operator, who can place the ensilage wherever desired.

One man and an Economy Distributor can do the work of three or four and do it better and more quickly. It works automatically—requires only to be guided. It will improve the packing and quality of your ensilage. It will pay for itself many times in the same and the packing are same as a superconduction.

times in a single season.

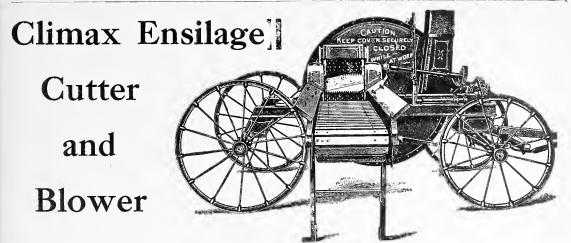
This Distributor can be used with any style blower. The sectional construction permits convenient adjustment to the decreasing space of the silo as it fills. The tube is thus kept always at the required length. The chains are steel and the hooks to which the chains fasten are of wrought iron.

SIZES AND PRICES.

We recommend:

- 6 joints and 1 top section for silos 24 feet high.
- 8 joints and 1 top section for silos 30 feet high.
- 10 joints and 1 top section for silos 36 feet high.

Other heights in proportion.



The Climax is a Pneumatic Ensilage Cutter or Blower. Both the cutting and elevating are done by a large wheel which carries the knives on one side and the elevating fans on the other. Both the cutting and elevating, therefore, are done at one operation, in a much simpler manner and with the expenditure of much less power than in those machines where the elevating device is a fan attachment added to the cutter.

The ease with which such great quantities of ensilage can be placed in the highest sllos by our machines is not due alone to the wind force of the blower, as in the cylinder cutters, but principally to the impelling power of the heavy wheel which answers the combined purpose of cutter, blower and balance wheel. This wheel weighs from 190 to 375 pounds, according to capacity. The cut material falls from each knife blade to the corresponding fan and is thrown up with such force that the air drawn in and compressed completes the delivery with the least expenditure of power,

THE CLIMAX KNIFE WHEEL

The advantage of the webbed wheel is that it affords practically no place for the accumulation of binder string and dry corn leaves that might be drawn through, thus reducing friction in the fan case to a minimum.

The knives are arranged so that they shear from the outer end of the cutting plate toward the inner end near the main shaft. The inward shear is a great saver of power. Other machines of the wheel type cut in the reverse direction. The mechanical principle in the operation of a wheel cutter is the same as the working of a pair of shears, one blade of which is stationary. Whatever material is pushed before the knife in our machine, is cut where the cutting power is greatest.

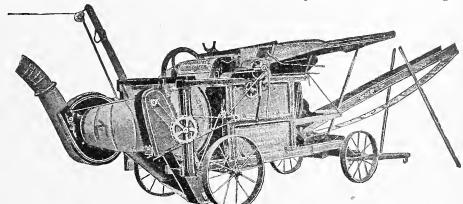
In other machines, any material yielding before the knives, and it is considerable when they are

In other machines, any material yielding before the knives, and it is considerable when they are dull, is finished furthest from the shaft, requiring more power, with a tendency to drag rather than cut. A pair of scissors will cut much easier near the rivet than at the points. Illustrated catalogue and prices sent

Milwaukee Corn Husker and

Shredder

on request.



These machines are equipped with the latest up-to-date improvements, with Sensible Safety Appllances, are easy and safe to operate, have strength, speed, and do good work.

Shredded fodder prepared by a Milwaukee Corn Husker and Shredder puts the stalks in the best possible condition for feeding and can be readily baled for market.

8 Roller Milwaukee Corn Husker has shelled Corn Separator and Bagger, 20 feet of 9-inch pipe

8 Roller Milwaukee Corn Husker has shelled Corn Separator and Bagger, 20 feet of 9-inch pipe on Blower, double feed tables and feed rollers 28 inches long. Is mounted on trucks with stub and slip tongues. Requires 12 to 14 Horse Power Engine.

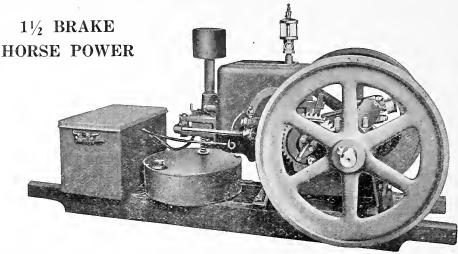
6 Roller Milwaukee Corn Husker has shelled Corn Separator and Bagger, 20 feet of 9-inch pips on Blower, double feed tables and feed rollers 24 inches long. Is mounted on trucks with tongue. Requires 10 to 12 Horse Power Engine.

4 Roller Milwaukee Corn Husker has shelled Corn Separator and Bagger, 20 feet of 9-inch pipe on Blower, feed rollers 20 inches long. Is mounted on trucks with tongue. Requires 8 to 10 Horse Power Engine.

2 Roller Milwaukee Corn Husker, 12 feet of 7-inch pipe, feed rollers 16 inches long, without trucks. We furnish trucks with tongues, whiffle-trees, and neck-yoke for 2 Roller Husker when ordered at an extra charge.

ILLUSTRATED CATALOGUE AND PRICES ON REQUEST

THE PITTSBURGH GASOLINE ENGINE



The 1½ H. P. Pittsburgh Gasoline Engine is manufactured, not built. All parts are made in lots

of 1,000 or more in exactly the same manner as parts for the very best automobiles.

Governor is of the Centrifugal Fly Ball Type, attached to the cam gear where it cannot catch clothing of operator (not on outside of flywheel). No extra gears, belts or chains used to drive governor. The governors of Pittsburgh Engines control the gasoline, electric spark and speed in exact proportion to load.

Ignition is by the Jump Spark method. This type has been found most suitable for small engines,

used about the house, as it is not noisy and is very economical of battery current.

Piston is machined all over and ground accurately to size. Three ground piston rings are used to prevent leakage past piston. Oil grooves are provided to assure even distribution of lubricant.

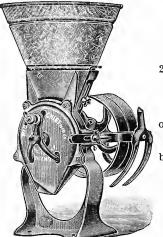
Spark Timing Lever. To prevent engine kicking backward while starting, and injuring operator, a spark timing device is provided. When this lever is thrown backward engine may be started by a child without danger of injury. After engine is started the lever is moved forward and engine is ready for work. This feature alone may save the cost of engine in doctor bills.

Speed Changing Device. By the use of this equipment the speed of engine may be altered at will while in motion. Devices of this kind are found on only the most expensive engines.

SPECIFICATIONS

SPECIFICA	ATIONS
Horse Power	Cylinder Bore
Piston Stroke $4\frac{1}{2}$ in.	Speed400 to 600
Pulley (Double)	Diameter of Fly Wheels16 in.
Weight of Fly Wheels	Diameter of Crank Shaft
Floor Space	Shipping Weight275 lbs.
PRIC	CE.

Complete as shown above......\$35.00 Prices on larger sizes quoted on request.



No. 20 Red Chief Power Mill

For grinding Corn Meal, Graham Flour, Stock Feed, etc.

An ideal mill for grinding mixed feed.

With a speed of 300 to 450 revolutions per minute, will grind 10 to

20 bushels feed per hour; 3 to 5 bushels fine corn meal per hour.

Power required, 11/2 to 2 horse power gasoline engine or over.

A Hand Crank for use when engine is not running. A child can grind a bushel of chicken feed by hand in 10 minutes.

Patent tension for regulating size of ground material, making change of burrs unnecessary.

Tight and loose pulley, 10 inches in diameter, 24-inch face. Galvanized Iron Hopper. Reversible belt shift. Feed regulator. All

bearings bronze bearing metal. Height 27 inches.

No wrench or screwdriver needed in making adjustments. **PRICE \$15.00**

No. 5 RED CHIEF RAPID GRINDING FEED AND GRIST MILL

With Balance Wheel.

Just the Mill for Small Poultry Raisers.

Recent improvements make this the most satisfactory Mill on the market. Clamps or bolts to box as desired.

The only Mill that can be cleaned and adjusted in a moment's time without the use of a wrench.

The Balance Wheel makes the Mill run steady and with the least possible power to turn it.

Capacity-2 to 4 Bushels per hour.

PRICE \$4.00

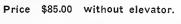


BOWSHER GRINDING MILLS

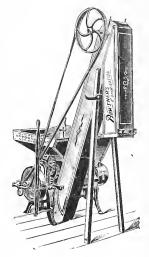
These machines represent the highest achievement in practical feed mill construction. Their convenience and simplicity of operation, wide range of usefulness, durability of construction and beauty of design place them pre-eminently in a class by themselves. Nothing has been spared in the construction of Bowsher's "Combination" mills to make them thoroughly efficient "general purpose" grinders.

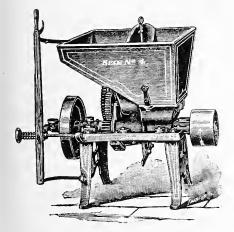
Aside from the high class of workmanship characterized throughout the mills, the feature that makes them unique among grinders is the peculiar type of cone-shaped grinding plates employed, which secure for the mills many advantages in the way of light running qualities, large capacity; and economy of operation. The "Combination" mills are manufactured in eleven sizes, for use with from two to 25 H.P., and are fully described in a special circular which will be mailed on request. Suitable "sacking" or "wagon-box" elevators furnished for all sizes when desired.

Size No. 8—The No. 8, shown here with elevator, incorporates all the advantages peculiar to the "Combination" line; the cone-shaped grinders, which present a larger grinding surface close to the center of the shaft and run empty without injuring themselves; the wooden relief lever, by which the grinders may be instantly thrown wide apart to prevent choke-up or eliminate foreign substance; perfect lubrication of all bearings; positive feed for ear corn; and the divided hopper which handles ear corn, with or without the shuck, and any kind of small grain at the same time, crushing, grinding and mixing the two together perfectly in any proportion desired. Power required, 10 to 15 H.P.



Price \$100.00 with 4 in. elevator.





Size No. 4—This mill is constructed on practically the same principle as the No. 8, the size representing the chief difference. It is equipped with the cone-shaped grinders, the wooden relief lever has positive feed for ear corn, divided hopper, etc. This machine will handle successfully ear corn, with or without the shuck, and all kinds of small grain. Has perfect regulation for coarse or fine grinding, and the burrs may be allowed to run empty without injury. Power required, 6 to 10 H.P.

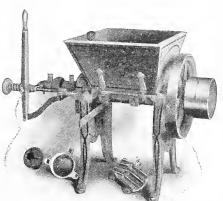
Price \$60.00 without elevator.

Price \$75.00 with 4 in. elevator.

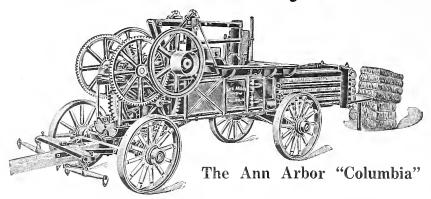
Size No. 0—This is the smallest mill in the "Combination" line, but presents a high type of workmanship and construction rarely to be found in mills suitable for very small powers. It will feed itself on ear corn and handle any kind of small grain satisfactorily. The hopper is all in one, but is sufficiently wide and long that ear corn may be shoveled into it. It is equipped with the cone-shaped grinders, the wooden relief lever, and many other advantages of the larger sizes. Power required, 2 to 4 H.P.

Price \$30.00 without elevator.

Price \$38.00 with 3 in. short elevator.



Ann Arbor Hay Presses



THE ALL-ROUND HEAVY SERVICE CHAMPION.

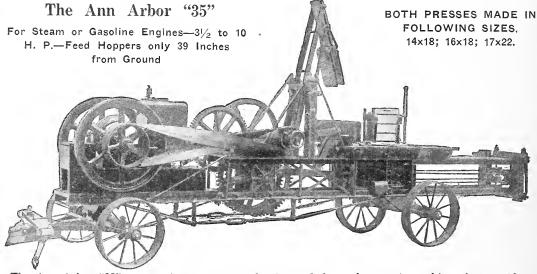
For Steam or Gasoline Engine-6 to 15 H. P .- Makes 140 to 175 lbs. Bales.

You can do anything with the Columbia that you would ever ask any hay press to do. It is a double geared machine designed for general purpose baling and is generally used where the hay press is to be driven by steam power.

The Columbia is the machine that made our reputation years ago. The best features of Ann Arbor construction are in it. It has always been our leader—the Columbia presses that we sold 15

and 20 years ago are still giving good service today.

Where greater baling capacity is required with weight in the bales this double geared press is by far the most desirable. Careful tests made by our experimental department have proved that in hard baling the double geared press stands 33% more work than the single geared presses of other manufacture.



The Ann Arbor "35" was designed to meet the demand for a low cost machine that could turn out first quality bales of from moderate to heavy weight.

Baler men have had great success with this machine. It is equipped with all the Anteatures and its construction is of that sturdy type that all experienced operators demand. It is equipped with all the Ann Arbor

The "Thirty-Five" is a single geared machine, but it is designed to transmit to the feeding mechanism the full force of the power delivered from any engine.

It is built so that you can feed the hay into it direct from the ground without table. Table is furnished, however, with every press.

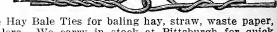
ILLUSTRATED CATALOGUE AND PRICES ON REQUEST.

STEEL WIRE BALE TIES

CROSS-HEAD

SINGLE LOOP

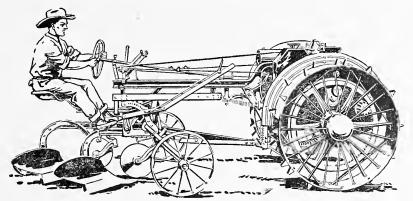




We make a specialty of furnishing Steel Wire Hay Bale Ties for baling hay, straw, waste paper, etc., to suit all the different sizes and styles of balers. We carry in stock at Pittsburgh for quick shipment the leading sizes of cross-head and single loop ties and can also make prompt shipments direct from factory. Prices will be quoted on request.

Moline-Universal Tractor

For Plowing, Harrowing, Planting, Cultivating, Haying, Harvesting and Belt Work



MOLINE-UNIVERSAL TRACTOR AND TWO BOTTOM GANG PLOW.
THE IDEAL TRACTOR

The Moline-Universal is the ideal tractor for the average size farm. It pulls the usual five-horse load and will do as much work as seven horses, because of its greater speed and endurance. It requires less space than one horse and also less care. It can be used for plowing, harrowing, planting, cultivating and harvesting—in fact all field work.

USES ARE MANY AND VARIED

As an all-the-year-round motor proposition the Moline-Universal Tractor leads the field. From the start of field preparation in the spring until the harvests are stored in the fall this tractor can be used constantly and satisfactorily with the services of only one man required throughout. The company making it has provided attachments for all farm implements so that a man can go from plowing to cultivating and so on through the list by simply "hooking on" the different implements needed for the work.

Then in the fall when all field work has been accomplished this same tractor can be used as a stationary engine, developing 12 horsepower on the belt and can be used all winter for grinding, pumping, sawing wood, etc. Surely its uses are many and varied.

The Moline-Universal is easier to handle than a team of horses, weight about the same, turns in a 16-ft. circle and will back with the implement attached. It is compact, simple, close coupled, a wonderful puller and carries no dead weight. An outstanding feature is that it is operated from the seat of the implement attached and only requires one man no matter what the operation. No other tractor on the market will do such a great variety of work, at such a low cost, and there is none so correct in design and construction.

TWO-WHEEL TYPE

On the Moline-Universal the front wheels are used for driving and the implement attached forms the rear wheels. This makes a compact unit easy to guide and handle, will back as easily as go forward, permits close work in small fields and short corners and lifts itself out of dead furrows and ditches. This close coupled feature alone makes the Moline-Universal superior to all other tractors.

Every ounce of weight on the Moline-Universal is placed on the driving wheels. This accounts for the great traction and drawbar pull and serves to keep down the weight—thus there is no dead load to carry as is common on other makes.

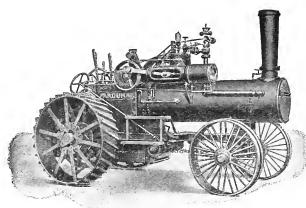
JUST THE RIGHT SIZE

The Moline-Universal is just the right size for plowing, and will cover from 4 to 12 acres a day—because it works faster and longer and makes fewer stops than horses. If, on the other hand, it were large enough to pull three or four plow bottoms it would be too large for other operations such as cultivating, mowing, etc., in small fields. It would cause packing of the soil and besides would be too expensive to operate.

Farquhar Engines and Threshers

The increasing reputation of Farquhar machinery in the field from year to year speaks for itself, and we can promise the same high grade material, and even more careful workmanship and inspection, in the construction of all our machinery in the future as in the past.

Farquhar Style K Regular Traction Engine



The Farquhar style "K" traction engine is a single cylinder, double drive, independent mounted traction engine, built for general work. The regular style "K," as shown by the accompanying illustration, is built in four sizes—10, 12, 15, and 20 horsepower.

In designing this engine, our aim was to build a plain, simple, practical and efficient engine for all around work, an engine that is simple, easy of adjustment and operation and will stand up to all kinds of work: threshing, sawing, plowing, or road work of any kind.

CATALOGUE OF PORTABLE, TRACTION AND VERTICAL ENGINES AND BOILERS SENT ON REQUEST.

Farquhar Vibrator Thresher

The founders of the Farquhar Company were pioneers in the design and manufacture of machines for threshing and cleaning grain. The first success was achieved with what was known at that time as the plain Groundhog Thresher. Then came the small combined thresher and cleaner, run with horses and tread power. Next came the Farquhar Rake Separator, which was the real beginning of a successful, all-around thresher and cleaner.

Next came the Farquhar Vibrator, which stands today as the highest perfection of a modern thresher for all

fection of a modern thresher for all around work; also the New Farquhar, which is a combination of the best features of the two machines.

These machines are now built in the following sizes, regular standard machines, and in the future the different machines will be designated by these sizes instead of numbers as heretofore.

The sizes given mean cylinder opening and inside width of separator back of cylinder.

20, x 35, Approximate weight, 3,800 lbs.

30 x 49, Approximate weight, 5,700 lbs.

24 x 41, Approximate weight, 4,750 lbs.

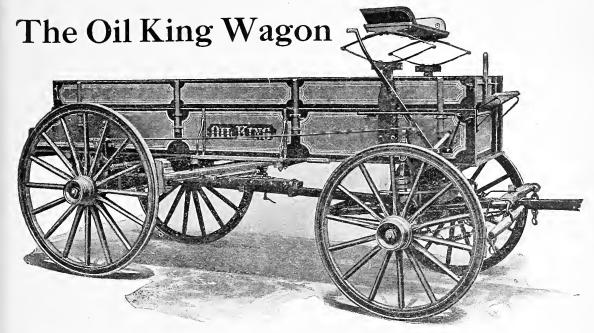
33 x 52, Approximate weight, 6,100 lbs.

27 x 45, Approximate weight, 5,080 lbs.

36 x 58, Approximate weight, 6,500 lbs.

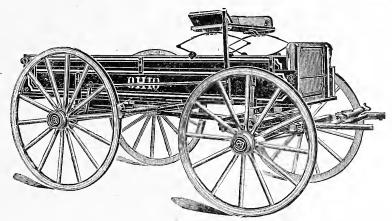
The Farquhar Vibrator is especially adapted for merchant threshing and large crops. These machines are very simple in construction, as may be seen from the illustration herewith; nothing complicated about them. At the same time they are very strong and substantial so as to stand the strains required on account of the extra attachments used in modern threshers.

The great feature of the Farquhar Vibrator is its simplicity. At the same time, in efficiency for all-around work, it has no equal.



The Oil King Wagons are made from the very best material obtainable, are well ironed and specially adapted for general farm purposes and heavy hauling. We now furnish them with low front wheels turning under body to the coupling pole. When made this way and equipped with Bolster Springs the Oil King makes an ideal market wagon. We furnish them with any width of tire desired, with Steel or Cast Skeins, Stiff Tongue and Tongue Chains, or Drop Tongue and Neckyoke.

The Ohio One-Horse Wagon



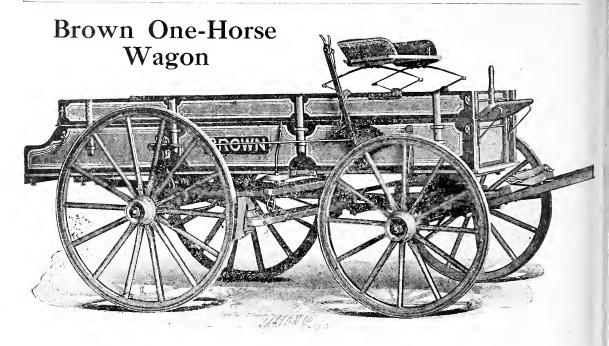
This wagon is designed to meet the demand for a moderate price wagon for light work. Made in two sizes, No. 18, 21/4x7 skein, and No. 19, 23/8x7 skein.

Nothing but the best material is used in their construction. Hickory Axles, Second-Growth Oak and Hickory Spokes, White Oak Reaches, with best Yellow Poplar in the Boxes.

Furnished with Top Gear Brake, Box Brake or without Brake.

Dimensions of lower bed: Depth, 10 inches; length inside measure, 8½ feet; width between standards, 38 inches; Top Box, 4 inches high; wheels, regular height, 3 feet 6 inches front, 4 feet rear; tire, 1%x3%. Write for prices.

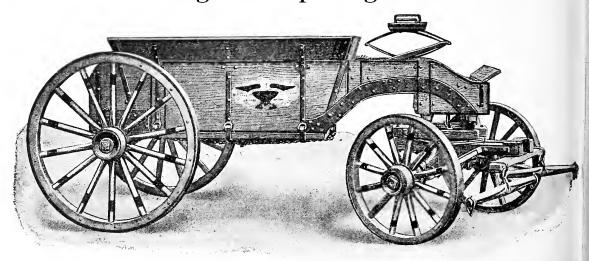
Special catalogue and prices furnished on request.



The Brown One Horse Wagon is made extra heavy and well ironed. It will outwear two ordinary one horse wagons. Made with either cast or steel skeins, top gear or swinging brake; with falling tongue and neckyoke for two horses when desired.

Furnished in four sizes from $2\frac{1}{4}x7$ inches to 3x9 inches, weighing from 800 to 1,000 pounds, with a capacity from 1,200 to 2,500 pounds. Regular tire $1\frac{1}{2}x\frac{1}{2}$ inches, but other widths and thicknesses can be furnished. Special catalogue and prices on request.

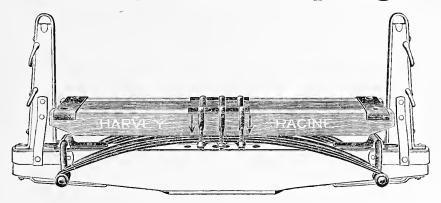
Eagle Dump Wagon



THE WAGON OF TODAY-NOT YESTERDAY.

The dump wagon that goes out in the world's work today must be the product of experience. It must have utility, that is it must work well. It must hold its load when desired. It must release its load quickly when dumping time comes. It must stand up under Page buckets and great steam shovels that drop 1, 1½ and 2 yards of material into it. The wagon of today must be durable and it must wear. Its front gear and the connection to the body must be made so it will not twist and weaken the neck of the wagon when going into and out of the rough places. It must be made to go anywhere a team can travel.

Harvey Bolster Springs



You must be interested in anything that will add to your comfort and save you money. This is just what a pair of our Bolster Springs will do for you. They will change your farm wagon into a spring wagon. They relieve the jars, jolts, strains and noise of a springless wagon. They make it run easier, smoother and quieter.

PRICE PER SET .-- Always give capacity and length wanted.

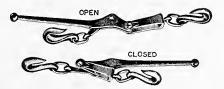
Width and No of Leaves	Capacity.	For 36 or 38 in. Bolster.	For 40 or 42 in. Bolster.	For 44 in. Bolster.	Width and No. of Leaves.	Capacity.	For 36 or 38 in. Bolster.	For 40 or 42 in. Bolster.	For 44 in. Bolster.	
1½x3 1½x4 1¾x4 1¾x5 2 x5	$\begin{array}{c c} 1000 \\ 1500 \\ 2000 \\ 2500 \\ 3000 \end{array}$	\$6.00 6.50 7.75 8.50 9.50	\$6.50 6.75 8.50 9.50 10.25	$\begin{array}{c} \$6.75 \\ 7.25 \\ 9.50 \\ 10.25 \\ 11.00 \end{array}$	$\begin{array}{ c c c c c }\hline 2 & x6 \\ 2 & x7 \\ 2 \frac{1}{2}x6 \\ 2 \frac{1}{2}x8 \\ 2 \frac{1}{2}x10 \\ \hline \end{array}$	4000 5000 6000 8000 10000	\$10.25 11.00 13.50 16.25 18.75	\$11.00 12.00 15.00 17.50 20.00	\$12.00 12.75- 15.75- 18.25 20.75	



PRICE PER SET.

									4Z-1H.
1,000	lbs.								\$4.00
1,500	lbs.								4.75
2,000	lbs								5.25

The Goodyear Load Binder



Binds Equally Successfully

lumber, ties, logs, timbers, mixed lumber, boilers, pipe, poles, in fact any load which requires binding with a chain.

Fits Any Chain

from one-fourth to one-half inch, is easily applied, and is the greatest time-saver for the teamster ever invented. Saves its cost many times in a year, with absolutely no danger of accident.

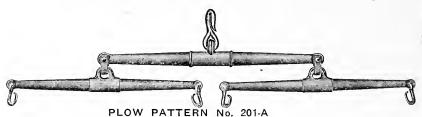
Price, each, \$1.75; postpaid, \$1.95

"Neverbreak" Tubular Steel Cultivator Singletrees WITH HOOK IN CENTER CLIP.

24-inch Cultivator Singletree....\$0.55 26-inch Cultivator Singletree....\$0.65 30-inch Cultivator Singletree....\$70

32-inch Cultivator Singletree.....\$0.75

"Neverbreak" Tubular Steel Doubletrees



"Neverbreak" Tubular Steel Doubletrees and Singletrees are made from hollow tubes, tapered from the center, with reinforced ends securely welded under a drop hammer, thus affording ample wearing surface and keeping out moisture. Singletree. Per Set. Doubletree.

No. 2—Pattern No.	201-A	36 in.	30 in.	\$2.50
No. 3—Pattern No.	201-A	38 in.	32 in.	2.75
No. 2—Pattern No.	201-A Contractors.	40 in.	34 in.	3.50

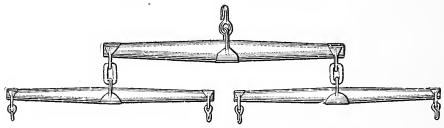


Wagon Pattern No. 217

Can furnish Doubletree with Pin-Hole in Center if desired

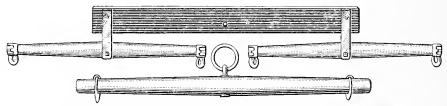
No. 2 Pattern No. 217—48 in. Doubletree 36 in. Singletrees\$4,00 The Singletrees are same style as shown in Pattern 201-A.

Wood Plow Doubletrees



No. 2-A. Doubletree 3½x38 in., singletrees 2¾x34 in., end hook ¾ in. Complete...\$2.50 The above set made from S. G. Oak, Hickory and Ash. Painted Red.

Harvester Doubletrees and Yoke



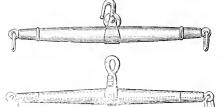
No. 46-A. Complete, including doubletree, singletrees and yoke Complete hitch for Land Rollers, Hay Rakes, Tedders, Mowing Machines or any implement where flat doubletree is used. Painted Red.

Team Neck Yokes Ironed



Made from S. G. Oak, Hickory or Ash.

3 in.—48 in. long; ring 5% in. 3½ in. diameter, each



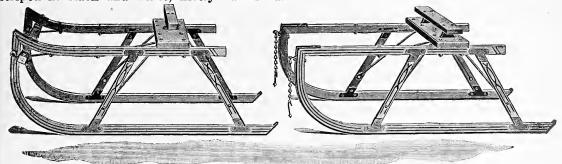
Breast Yokes—Made From Hickory

No. 36-A. 13/4 or 2 in.—24 in. long.

No. 41-A. Snap with band around center, $1\frac{3}{4}$ or 2 in.—24 in. long. Each.......\$0.60 Neck and B east Yokes Painted Red.

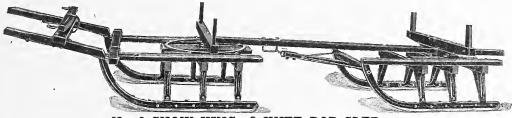
BOB SLEDS

Our Bob Sleds are made to order out of selected hardwood lumber, painted red, striped in black and white, nicely varnished.



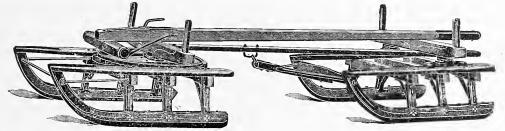
No. 21. LIGHT BOB SLED

Runners and raves 1\%x1\% in., beams 1\%x6 in., hind bolster oscillating, height from ground to top of bolster 18 in., length on run 37 in., track 37 in. from center to center with 1\% in. steel shoe. Price with shafts \$19.00; without shafts \$15.50.



No. 2 SNOW KING-3 KNEE BOB SLED

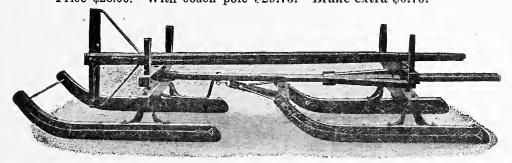
Full iron circle, straight heel shaft with combination shift bar for either center or side draft, runners $1\frac{1}{4}x^2$ in., cast shoe 1 in. on the face, 33 in. on the run, beam $1\frac{1}{2}x^2\frac{1}{2}$ in., raves 1x6 in., height from ground to top of bolster 21 in., track 37 in., center to center, bolsters either 38 in. or 42 in. Price with pole or shafts \$24.00. Brake extra \$6.75.



No. 8 SNOW KING-3 KNEE BOB SLED

Full iron circle, runners 1\(^4\x3\) in., raves 1\(^4\x7\) in., height of sled from ground to top of bolster 22 in., benches and raves bolted together with 24 bolts, which makes a very strongly constructed sled, track 37 in. from center to center, bolsters 38, 39, 40 or 42 in., supplied regularly with drop pole, can also be supplied with coach pole with chain ends.

Price \$28.00. With coach pole \$29.75. Brake extra \$6.75.



No. 34, MANDT PATENT STEEL KNEE, OSCILLATING BOB SLED WITH HOUNDS AND SWIVEL REACH.

Runners 2 x 4 in., cast shoe $1\frac{3}{4}$ in. on the face 40 in. on the run, beams and bolsters $3\frac{1}{2}$ x $4\frac{1}{2}$ in., track 37 in. from center to center, bolsters 38 or 42 in. Price \$24.00.

Brake extra \$6.75.

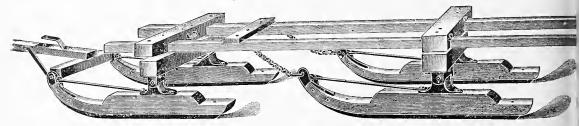
LOB SLEDS—Continued



No. 18 SNOW KING BOB SLED, MAINE PATTERN.

Runners 21/2 x 5 in., cast shoes 21/2 in. on the face, 54 in. on the run, beams 41/2 x 71/2 in., bolsters $3\frac{1}{2}$ x $4\frac{1}{2}$ in.. height of sled from ground to top of bolster 22 in., track 37 in. center to center. Price \$35.00. Brake extra \$6.75.

Sled No. 18 can be supplied with side brake only.



No. 30—OSCILLATING BOB SLED.

Runners 2 x 4 in., cast shoe full width of runner 4 ft. long with flange 1 in. deep in center, bunks and bolsters 4 x 5 in., track 38 in. from center to center, supplied with either single or double reach, bolsters 38 or 42 in. Price \$30.00. Brake extra \$6.75.

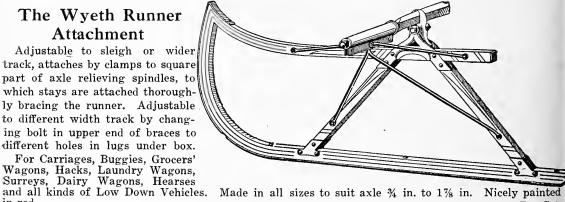
No. 31—OSCILLATING BOB SLED.

Same as No. 30, excepting runners are 5 in. wide and bunks and bolsters are 4 x 6 in. and the knuckles are heavier. Price \$32.00. Brake extra \$6.75.

The Wyeth Runner Attachment

Adjustable to sleigh or wider track, attaches by clamps to square part of axle relieving spindles, to which stays are attached thoroughly bracing the runner. Adjustable to different width track by changing bolt in upper end of braces to different holes in lugs under box.

For Carriages, Buggies, Grocers'



in red. Per Set No. 1 for \%" axle, and No. 2 for 1" axle..... No. 4 for 11/8" axle, and No. 5 for 11/4" axle..... 9.75 No. 6 for 13%" axle, and No. 7 for 1½" axle.....



CLARK HEATERS

Postpaid No. 5. 12 inches long, weight 4 lbs. Not covered; white metal ends\$1.25 \$1.35 No. 3D. 14 inches long, weight 7 lbs. Covered with Brussels carpet; white metal ends. 2.00 2.20

2.40

No. 7D. 14 inches long, weight 9 lbs. Has flat, slanting top; covered with Brussels

No. 1. 14 inches long, weight 10 lbs. Covered with royal velvet carpet; has nickel 3.20

COAL FOR CLARK HEATERS

1 dozen cakes $(7\frac{1}{2}x2\frac{1}{2}x1\frac{1}{4})$, weight 9 pounds.... \$0.90 Packed in cases of 1, 6, 12 and 18 doz.

Vegetable Seeds

Free Delivery by Parcel Post

At the prices named in this list We Pay the Postage on all Vegetable and Flower Seeds in packets, ounces, quarter-pounds and pounds. On Peas, Beans, Corn, Onion Sets, etc., in pints and quarts the amount to be added for postage is given in connection with the prices. On half-pecks, pecks and larger quantities postage must be added at regular zone rates, as shown in table on first cover page. We will deliver free by freight or express (at our discretion), all orders for Vegetable and Flower Seeds aggregating \$10 or over, to any point in Pennsylvania, Ohio, West Virginia or Maryland.

HOW TO ORDER

Write your Name, Post Office, State and Shipping Station plainly on every order. Tell us whether you want the goods to be forwarded by Parcel Post, by Express or by Freight. In the absence of explicit instructions we use our best judgment in shipping.

TERMS

Our terms are strictly cash with order, except to customers who have previously arranged for a "Charge Account." Upon application, a reasonable credit will be allowed realty owners and other responsible purchasers. On orders for Vegetable and Flower Seeds amounting to \$5 and upward a discount of 5 per cent will be allowed when cash is sent with order.

Remittances can be made by postal money order, bank draft, registered letter, or express company's money order. Amounts less than two dollars may be remitted in postage stamps.

Seeds in Packets—We put up all of our packet seeds out of the same stock as larger quantities, which gives the gardener on a small scale the same fresh reliable seeds as the largest market gardener.

Prices subject to change without notice.

Quantity Rates—Half bushels will be charged at bushel rates; half pecks at peck rates; half pounds at pound rates. Less than half pecks at quart rates; less than quarter pounds at ounce rates.

Our special Vegetable and Flower Seed catalogue which gives full description of the different varieties and directions for culture, will be mailed on request.

GUARANTEE

A great many contingencies may arise to prevent the best seeds from giving satisfaction, and for this reason it is impossible under all circumstances to Guarantee Seeds. While we exercise the greatest care to have all seeds pure and reliable, we give no warranty, expressed or implied, and will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms, they are to be returned at once.

ASPARAGUS

Nine ounces of Seed to 100 yards of row. 15 pounds to the acre.

1/4 lb.	lb.
\$0.15	\$0.50
.15	.50
.20	.60
ch.	
arieties	:
	.\$0.75
	. 3.00
	. 5.50
	/-ac

BEANS

At these prices we do not pay postage. If wanted by mail, add 8 cents per pint; 10c per quart.
POLE OR RUNNING

One quart of seed to 100 to 200 hills. 8 to 10 quarts to the acre.

o to it quarts to	CIIO	acre.		
	Pt.	Qt.	Pk.	Bu.
Green Seeded Early Jersey.	0.25	\$0.40	\$2.50	\$9.50
Extra Early Jersey Lima	.15	.30	2.00	7.50
Seibert's Early Lima	.15	.30	1.90	7.00
King of the Garden Lima	.15	.30	2.00	7.00
Leviathan	.15	.30	-2.00	7.50
Carpenteria	.15	.30	2.00	7.50
Large White Lima	.15	.30	1.90	7.00
Kentucky Wonder or Old				
Homestead	.15	.30	2.00	7.50
Kentucky Wonder Wax	.20	.40	2.50	8.50
Lazy Wife	.15	.30	2.25	8.00
Scarlet Runner	.20	.40	-2.50	9.00
King Horticultural	.20	.40	2.50	9.00
BUSH LIM	IAS			
Fordhook	.20	.40	3.00	11.00
Burpee's	.20	.35	2.50	9.00
Burpee's Improved	.20	.40	2.90	10.00
Woods Prolific	.20	.35	2.50	9.00
DWARF GREEN	POD	DED		

Three quarts of Seed to 100 yards of row. 1½ to 2 bushels to the acre when drilled in, depending on variety.

ing on variety.				
	Pt.	Qt.	Pk.	Bu.
Burpee's Stringless	30.20	\$0.40	\$2.75	\$10.00
Improved Extra Early Red				
Valentine	.15	.30	2.00	7.00
Refugee or 1,000 to 1	.20	.35	2.25	8.00
Stringless Green Pod Refu-				
gee	.20	.40	2.75	10.00
White Kidney	.20	.40	2.50	9.00
Longfellow	.20	.35	2.25	8.00
Dwarf Horticultural	.20	.40	2.75	10.00
Giant Stringless Green Pod	.20	.40	2.75	10.00
Black Valentine	.20	.35	2.25	8.00
Bountiful	.25	.50	3.25	12.00
Full Measure	.20	.40	2.75	10.00
White Marrow Fat	.20	.40	2.50	9.00
White Navy or Pea Bean	.20	.40	2.50	9.00
DWARF WAX	POD	DED		

Three quarts of Seed to 100 yards of row. 11/2 to 2 bushels to the acre when drilled in, depending on variety.

ı	ing on variety.				
l		Pt.	Qt.	Pk.	Bu.
l	Golden Wax Improved\$	0.25	\$0.50	\$3.25	\$12.00
l	Golden Eye Wax	.25	.50	3.25	12.00
ļ	Keeney's Rustless Golden				
1	Wax	.25	.50	3.25	12.00
l	Pencil Pod Black Wax	.30	.60	4.00	15.00
Ì	Flageolet Scarlet	.30	.60	4.00	15.00
ĺ	Round Pod Kidney Wax	.30	.60	4.00	15.00
l	Wardwell's Kidney Wax	.30	.60	4.00	15.00
l	Davis White Wax	.30	.60	4.00	15.00
l	Improved Prolific Black Wax	X			
l	or German Wax	.30	.60	4.00	15.00
İ	Hodson Wax	.30	.60	4.00	15.00
١	Sure Crop Stringless Wax.	.30	.60	4.00	15.00
ļ	Brittle Wax	.30	.60	4.00	15.00

BEETS—For Table Use

Five ounces seed for 100 yards.	4 lbs.	to the	acre.
	oz.	¼ lb.	lb.
Early Model	\$0.10	\$0.35	\$0.85
Crosby's Extra Early	.10	.25	.75
Extra Early Egyptian	.10	.25	.75
Extra Early Eclipse	.10	.25	.75
Dewing's Early Blood Turnip	.10	.25	.75
Early Blood Turnip	10	.25	.75
Detroit Dark Red	.10	.35	.85
Crimson Globe	.10	25	.75
Swiss Chard	.10	.25	.75
Packats_All Variaties	50.00	ch	

Packets—All Varieties, 5c each.

CATTLE BEETS or

MANGEL WURZEL

Six pounds to the acre in drills.

	OZ.	¼ lb.	lb.
Norbiton Giant Long Red	.\$0.05	\$0.15	\$0.50
Golden Tankard	05	.15	.50
Long Red Mammoth	05	.15	.50
White Sugar	05	.15	.50
Red Globe	05	.15	.50

BRUSSELS SPROUTS

An ounce of seed will produce	about	2,000	plants.
	oz.	1/4 lb.	lb.
White Cape	. \$0.35	\$1.25	\$4.00
Purple Cape	35	1.25	4.00
Packets, all varieties	, 5c ea	ach.	

BROCCOLI

An ounce of seed will produce about 2000 plants.

HACE-DWARF IMPROVED						
acket	0.05					
unce	.15					
pound	.50					
pound	1.50					

CABBAGE

One ounce of seed will produce from 1500 to $2000\ \mathrm{plants},$

	oz.	1/4 lb.	lb.
Eureka	\$0.20	\$0.50	\$1.75
Select Very Early Jersey Wake	-		
field	.20	.50	1.75
Charleston Large Wakefield	.20	.50	1.75
Glory of Enkhuizen	.20	.50	1.75
Copenhagen Early Market	.35	1.25	4.00
Henderson's Early Summer	.20	.50	1.75
Burpee's All Head		.50	1.75
Burpee's Surehead	.20	.50	1.75
Succession	.20	.50	1.75
All Season	.20	.50	1.75
Hollander or Danish Ball Head,			
Short Stem	.25	.75	2.50
Hollander or Danish Ball Head,	,		
Long Stem	.25	.75	2.50
Premium Flat Dutch	.20	.50	1.75
Swedish (Flat Head)	.20	.60	2.00
Mammoth Red Rock	.20	.60	2.00
Danish Round Red	.25	1.75	2.50
Large Late Drumhead	.20	.50	1.75
Drumhead Savoy	.20	.60	2.00
Green Curled Savoy	.20	.50	1.75
Packets—All Varieties 5c, ex which is 10c.		Copenh	agen,
Pon Corn on the ear (White		10c ne	r 1b.:

Pop Corn on the ear (White Rice), 10c per lb.; 3 lbs., 25c; if wanted by mail add 8c for 1 lb., 12c for 3 lbs.

CAULIFLOWER

One ounce of seed will produce about 2000 plants.

Pkt. ¼ oz. oz. ¼ lb.
Select Early Snow Ball..\$0.40 \$0.75 \$2.50 \$8.00

CARROT

Three ounces of seed to 100 yards of row. Three to four pounds to the acre.

0	Z	14 ID.	ID.
Early Scarlet Horn, pointed root \$0	.10	0.30	\$1.00
Early Scarlet Horn, blunt root.		.30	1.00
Danver's Half Long	.10	.30	1.00
Improved Long Orange	.10	.30	1.00
Chantenay	.10	.30	1.00
St. Valery	.10	.30	1.00
Half Long Luc	.10	.30	1.00

Packets—All Varieties, 5c each.

CHICORY

CORN SALAD

Oz. ¼ lb. lb.
Large Seeded\$0.10 \$0.20 \$0.60
Packets—5c each.

CELERY

One ounce of seed will produce from 3000 to 4000 plants. Eight ounces per acre. Golden Self-Blanching, Pkt. oz. 1b. American Grown\$0.05 \$0.35 \$1.00 \$3.00 Golden Self-Blanching. French Grown Seed.... 15.00.20 .60 2.00 .05 .20 .60 2.00 .05 .20 .602.00 .05Perfection Winter20 .60 2.00 Celeriac, Large Prague.... .05.20 2.00 Perfection Heartwell20 .05 .602.00 .20 2.00 Winter Queen60 .05Dwarf Golden Heart05.20 .75 2.50Celery Seed for Seasoning .05 .40

SUGAR CORN

One pint of seed for 100 yards of row. Eight to ten quarts per acre. At these prices we do not pay postage. If wanted by mail add 8 cents per pint; 10 cents per quart.

Pt. Ot. Pk. Bu.

	1 (.	·υχυ.	T 17.	Du.
Early Mayflower	\$0.25	\$0.40	\$2.75	\$10.00
Peep O'Day	.15	.30		7.00
Pocahontas		.40	2.25	8.00
Golden Bantam	.25	.40	2.75	10.00
Golden Cream	.25	.40	2.75	10.00
Adams' Eaxtra Early (not				
a Sugar Corn)	.15	.25	1.50	5.00
Scott's Early Perfection	.20	.40	2.25	8.00
Premo, Extra Early	.20	.40	2.25	8.00
Extra Early Cory, white cob	.15	.30	2.00	7.00
Extra Early Minnesota	.15	.30	2.00	7.00
Early Evergreen	.20	.40	2.25	8.00
Kendel's Early Giant	.20	.40	2.25	8.00
Early Champion	.20	.40	2.25	
Early Mammoth	.20	.40	2.25	8.00
Late Mammoth	.20	.40	2.25	8.00
Stowell's Evergreen	.20	.40	2.50	9.00
Black Mexican	.25	.40	2.75	10.00
Country Gentleman	.25	.40	2.75	10.00
White Evergreen	.20	.40	2.50	9.00
Columbus Market	.20	.40	2.25	
Howling Mob	.15	.40	2.50	
Zigzag Evergreen	.20	.40	2.50	9.00

CRESS OR PEPPER GRASS

Pkt.	oz.	¼ lb.	lb.
Pepper\$0.05 (true)10			

CUCUMBER

Two pounds per acre. One	e ou	nce o	f seed	will
plant about 50 hills.				
I	Pkt.	oz.	¼ lb.	lb.
Davis Perfect\$	0.05	\$0.10	\$0.25	\$0.85
Livingston's Emerald	.05	.10	.25	.75
Early Frame	.05	.10	.25	.75
Improved Early White Spine	.05	.10	.25	.75
Arlington White Spine	.05	.10	.25	.75
Bennett's White Spine Imp'd	.05	.10	.25	.75
Extra Long or Evergreen				
White Spine	.05	.10	.25	.75
Early Cluster	.05	.10	.25	.75
Green Prolific or Boston				
Pickle	.05	.10	.25	.75
West India Gherkin or Bur	.10	.15	.40	1.00
Long Green Turkey	.05	.10	.25	.75
Japanese Climbing	.05	.10	.35	.90
Cumberland	.05	.10	.25	.75
Ford Hook Famous	.05	.10	.25	.75
Early Fortune	.05	.10	.25	.75
Extra Long Jersey Pickling	.05	.10	.25	.75
Klondike	.05	.10	.25	.75

DANDELION

IMPROVED FRENCH

One ounce of seed will sow about 100 feet of drill. Packet, 10c; oz. 30c; 1/4 lb. \$1.00; 1 lb. \$3.00

ENDIVE

Two ounces of seed for 100 yards of row. Three pounds per acre. Pkt., oz. 1/4 lb. lb. Green Curled\$0.05 \$0.15 \$0.40 \$1.50 .15 .40 1.50 .40 1.50

.05

.15

EGG PLANT

One ounce of seed will produce al	bout 1	.000 p	lants.
Pkt.	oz.	¼ lb.	lb.
New York Improved Purple			
Spineless\$0.05	\$0.30	\$1.00	\$3.50
Black Beauty	.30	1.00	3.50

HORSE RADISH ROOTS

					Doz.	100	1900
Maliner	Kren .				\$0.15	\$0.80	\$7.00
If	wanted	by	mail,	add 5	c per	dozen.	

KALE

One ounce of seed for 100	yards of	row.	Four
pounds per acre.			
P	kt. oz.	¼ lb.	lb.
Dwarf Curled Scotch\$0	0.05 \$0.10	\$0.25	\$0.75
Tall Curled Scotch	.05 .10	.25	.75
Siberian	.05 .10	.20	.60
Dwarf German	.05 .10	.20	.60

KOHL RABI

One ounce of seed will sow about	250 f	eet of	drill.
Pkt.	oz.	⅓ lb.	lb.
White Vienna\$0.05	\$0.20	\$0.60	\$2.00
Early Large Purple05			
Large Green or White05	.20	.60	2.00

LEEK

Two ounces of seed to 1	.00 yards	of row.	Four
pounds to the acre.			
	Pkt.	oz. ¼ lb.	1b.
Large London or Flag	\$0.05 \$0	0.15 \$0.40	\$1.50
Musselburg	05	.15 .40	1.50

LETTUCE

One ounce of seed will produce about 3000 plants or about 150 feet of drill. Four lbs. to

the acre.	or arr	п. г	our m	s, to
the acre.	T21-+	0.00	1/ 1h	1h
	r Kt.	OZ.	¼ lb.	ID.
Grand Rapids	.\$0.05	\$0.15	\$0.45	\$1.25
Early Curled Simpson, Whit	e			
Seeded	05	.10	.30	1.00
Black Seeded Simpson	05	.10	.30	1.00
Golden Curled	05	.20	.75	2.00
Large Summer Cabbage	05	.10	.30	1.00
Hanson (Improved)	05	.10	.30	1.00
Big Boston, White Seeded.	05	.10	.30	1.00
Big Boston, Black Seeded.		.10	.30	1.00
Brown Chartiers	05	.20	.75	2.00
Mammoth Black Seeded Bu	t-			
ter	05	.10	.30	1.00
Crisp as Ice		.10	.30	1.00
May King		.10	.30	1.00
Romaine White Paris		.10	.30	1.00
Iceberg		.20	.60	1.75
The Morse		.15	.40	1.25
		•		

MELON—WATER

One ounce of seed will plant 20 to 25 hills. Four pounds to the acre.

	PKt.	oz.	1/4 ID.	10.
Sweetheart	\$0.05	\$0.10	\$0.20	\$0.60
Kleckley's Sweets	05	.10	.20	.60
Tom Watson	05	.10	.20	.60

CITRON

	Pkt.	oz.	¼ lb.	16.
Red seeded	.\$0.05	\$0.10	\$0.25	\$0.75
Green Seeded	05	.10	.25	.75

MELON—Musk or Cantaloupe

One ounce of seed will plant about 60 hills. Two to three pounds to the acre. oz. 1/4 lb. Extra Early Hackensack—Light Green Flesh\$0.10 \$0.20 \$0.60 Hackensack or Turks Cap—Green .60 Flesh20 Miller's Cream—Yellow Flesh.. .10 .20 .60

Emerald Gem-Salmon Flesh.. .10 .20 .60 .20 .60 .20 .60

Packets—All varieties, 5c each.

MUSTARD

Five ounces of seed to 100 yards of row. Four pounds to the acre. Pkt. oz. ¼ lb. lb. Southern Giant Curled.....\$0.05 \$0.10 \$0.20 \$0.50 .10

Lambert's Pure Culture "Direct" Mushroom Spawn

Printed directions for growing furnished free. Per brick\$ 0.25 10 bricks 2.00 50 bricks It wanted by mail postpaid add for 1 brick 10c; 3 bricks, 15c; 5 bricks, 20c.

ONION

One ounce of seed will sow 100 feet of row. Five to six pounds per acre for large onions.

	OZ.	¼ lb.	Ib.
Extra Early, Red	\$0.15	\$0.45	\$.150
Large Red Wethersfield	.15	.45	1.50
Yellow Danvers, Flat	.15	.45	1.50
Yellow Globe Danvers	.20	.50	1.75
Yellow Dutch or Strasburg		.50	1.75
White Portugal or Silverskin	.25	.75	2.50
Prizetaker (Yellow)	.20	.50	1.75
Southport White Globe		1.00	3.50
White Bunching		.85	2.75
Early White Welch	.20	.75	2.50
Dooltota 111 maniation	F 0 00	ah	

Packets-All varieties, 5c each.

ONION SETS

	(Qt.	Pk.	Bu.
White		0.25	\$1.50	\$4.50
Yellow		.20	1.25	4.00

If wanted by mail add for 1 qt., 10c; 2 qts., 12c; 3 qts., 15c; special prices on large quantities quoted on request.

OKRA

Twelve ounces of seed to 100 yards of row. 20 pounds to the acre. Pkt. oz. ¼ lb. lb. Long Green\$0.05 \$0.10 \$0.20 \$0.60 .10

PARSNIP

Two ounces of seed for 100 yards of row. Eight pounds per acre.

OZ.	¼ lb.	lb.
Hollow Crown or Long Smooth \$0.10	\$0. 20	\$0.50
Guernsey	.20	.50
Maltese Half Long	.20	.50
White Lisbon	.20	.60

Packets-All varieties, 5c each.

PARSLEY

Two ounces of seed for 100 yards of row. Eight pounds per acre.

F F O	oz.	¼ lb.	1b.
Double Curled	.\$0.10	\$0.20	\$0.60
Champion Moss Curled	10	.20	.60
Plain or Single	10	.20	.60
Hamburg Turnip Rooted	15	.30	.85

Packets-All varieties, 5c each.

PEPPER

One ounce of seed will produce about 1,500 plants.

	oz.	¼ lb.	1b.
Ruby King	\$0.20	\$0.60	\$2.00
Sweet Spanish	.20	.60	2.00
Bull Nose	.25	.75	2.50
Long Red Cayenne	.20	.60	2.00
Small Cayenne	.25	.75	2.50
Chinese Giant	.40	1.25	4.50
Ruby Giant	.30	.90	3.00
Pimiento	.35	1.25	4.00
Chinese Giant, packets 10c; all	other	varieti	es 5c.

PUMPKIN

One ounce of seed will plant about 25 hills. 4 to 5 lbs. for an acre.

	Pkt.	oz.	1/4 lb.	lb.
Golden Cushaw	\$0.05	\$0.10	\$0.25	\$0.75
Livingston's Cushaw	05	.10	.25	.75

PUMPKIN—Continued

	Pkt.	oz.	1/4 lb.	lb.
Small Sugar (very fine)	\$0.05	\$0.10	\$0.20	\$0.50
Cushaw, Large Crookneck.	.05	.10	.25	.75
Large Cheese	05	.10	.20	.50
Mammoth Tours	.05	.10	.25	.75
King of Mammoth	05	.10	.25	.75
Connecticut Field (choice).		.05	.15	.40
Kentucky Field		.05	.15	.40

Five lbs. and over of Connecticut field and Kentucky field, 30c per lb.

PEAS

One quart of seed will sow about 100 feet of row. $1\frac{1}{2}$ to 2 bushels for an acre. Pt. Ot. Pk. Bu.

	1 0.	Q.C.	Y 17.0	L) u.
*Little Marvel	\$0.20	\$0.35	\$2.00	\$7.00
Prolific Early Market	15	.25	1.75	6.00
First and Best	15	.25	1.75	6.00
Alaska Extra Early	.15	.25	1.75	6.50
Pedigree Extra Early	15	.25	1.75	6.00
*Extra Early Telephone	.20	.35	2.00	7.00
*Prosperity or Gradus	20	.35	2.00	7.00
*Thomas Laxton	20	.35	2.00	7.00
*Prince Edward	.20	.35	2.00	7.00
*Laxtonian	25	.40	2.50	9.00
*Sutton's Excelsior (Dwarf)	.20	.35	1.75	6.50
*Nott's Excelsior	.20	.35	2.00	7.00
*Alderman	.20	.35	1.75	6.50
*Duke of Albany	20	.35	1.75	6.50
*Dwarf Telephone	15	.30	2.00	7.00
*Improved Telephone	.15	.25	1.75	6.50
*Carter's Telephone	.15	.25	1.75	6.50
*American Wonder	20	.35	2.25	8.00
*Duke of York	.15	.30	1.75	6.50
*Pioneer	.25	.40	2.50	9.00
*Peter Pan	.25	.40	2.75	10.00
*Potlatch	.15	.30	2.00	7.00
Mammoth Podded Sugar,				
Edible Pod	.25	.40	2.50	9.00
Canada Field and Cow P	eas—	Prices	furn	ished

Canada Field and Cow Peas—Prices furnish upon application.

* Indicates Wrinkled Peas.

Crimson Giant

Early Scarlet Globe

Celestial

At these prices we do not pay postage. If wanted by mail add 8 cents per pint; 10 cents per quart.

RADISH

One ounce of seed will sow about 100 feet of drill. 8 to 10 lbs. to an acre.

Pkt. oz. ¼ lb. lb. Very Early White Tip Forcing\$0.05 \$0.10 \$0.20 \$0.60 .20 .05.60 Cincinnati Market10 French Breakfast $\tilde{c}0.$.10 .20.60Long Scarlet Short Top20 .60 .10 .10 .20 .60 Early Scarlet Turnip05.20 White Box č0. .10.60

Non Plus Ultra05 .20 .60 .10White Strasburg05.10 Chartier Improved10 .20 .60 .05.20 Long Black Spanish05.10 .60 .20 $\tilde{c}0.$.10 .05 .20 .60 .10 .20 .60 White Stuttgart05 .10 Long White Spanish05 .20 .60 Market Gardener's Long .20 .60 Scarlet05.10 Chinese Rose20 .60 .05 .10 Giant Butter (Round Red). .25 .75 .05 .10Round Black Spanish05 .20 .60 .10Golden Yellow Oval05.10 .20 .50Icicle05 .10 .20 .05 .10 .25 .75 Burpee's Scarlet Button....

.05

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RHUBARB

Victoria	Pkt. oz. \$0.05 \$0.15		
Roots, each 15c, postpa paid \$1.70.	aid 20c; doz.,	\$1.50,	post-

SQUASH

Three ounces of seed for 100 yards of row. Three pounds to the acre.

	Pkt.	oz.	1/4 lb.	lb.
Fordhook	\$0.15	\$0.10	\$0.25	\$0.75
Mammoth White Bush	.05	.10	.20	.50
Essex Hybrid	.05	.10	.25	.75
Boston Marrow	05	.10	.20	.60
Warted Hubbard	05	.10	.25	.75
Improved Hubbard	05	.10	.25	.75
Golden Hubbard	05	.10	.25	.75
Orange Marrow	.05	.10	.20	.60

SUNFLOWER

		oz.	¼ lb.	lb.
Mammoth	Russian	\$0.05	\$0.10	\$0.25

SALSIFY

Four ounces of seed will sow 100 yards of row. Pkt. oz. 1/4 lb. lb. Mammoth Sandwich Island \$0.05 \$0.25 \$0.75 \$2.50

SPINACH

Pkt.	oz.	¼ lb.	lb.	4 lb.	50 lb.
New Zealand\$0.05	\$0.10	\$0.25	\$0.75	\$	\$
Improved Large Round					
Thick Leaved	.10	.20	.60	2.25	25.00
Bloomsdale Savoy	.10	.25	.75	2.75	30.00
Long Standing	.10	.20	.60	2.25	25.00
Victoria	.10	.25	.75	2.75	30.00
Triumph	.10	.25	.75	2.75	30.00
4 lb. lots and upward	are f	. o. b.	Pitts	burgh	ı, Pa.

TOMATO

Three ounces will sow 100 yards of row. Pkt. ½ oz. oz. ¼ lb. lb. John Baer\$0.15 \$0.60 \$1.002\$3.00 \$10.00 Northern Adirondack Earliana..... .25 .40 1.50 5.00 Earliana, Sparks'05 .15 .30 1.00 3.50 June Pink05 .15 .30 .90 3.00 Bonny Best05.90 .15.30 3.00Chalk's Early Jewel.. .05.30 1.00 .153.50 Early Detroit05 .20.351.003.50 Acme05.15.25 .752.50 Beauty05.15 .30 .90 3.00 Trucker's Favorite05 .15 .30 .90 3.00 Livingston's Globe05 .15.30 1.00 3.50 Matchless15 .30 1.00 .05 3.50Dwarf Champion05 .15 .25 .75 2.50Stone05 .15 .30 1.00 3.50 Buckeye State20 .05.35 1.35 5.00 .20 .40 1.505.00 Beefsteak05.15 .30 .90

TOMATO—Continued

	Pkt.	½ oz.	oz.	¼ lb.	lb.
Magnus	.\$0.05	\$0.15	\$0.30	\$1.00	\$3.50
Red Rock	05	.15	.30	.85	3.00
Yellow Plum	05	.15	.30	1.00	3.50
Greater Baltimore	05	.15	.30	.85	3.00
Golden Queen	05	.20	.35	1.00	3.50

TOBACCO

	Pkt.	oz.	¼ lb.	lb.
Connecticut Seed Leaf	\$0.05	\$0.30	\$1.00	\$ 3.0 0
Havana	.05	.30	1.00	3.00

TURNIP

	oz.	¼ lb.	lb.
Purple Top, Flat or Strap Leaf	\$0.10	\$0.15	\$0.40
Purple Top White Globe	.10	.20	.50
Cow Horn	.10	.20	.50
Cow Horn, 5 lbs. \$2.25; 10	lbs.	\$4.00	
Extra Early White Milan	.10	.25	.75
Packets—All varieties, 5	с өас	ch.	

Ruta Baga or Swede Turnip

Pkt.	oz.	¼ lb.	lb.
Sweet German $$0.05$	\$0.10	\$0.15	\$0.40
Improved Purple Top05	.10	.15	.40

HERBS

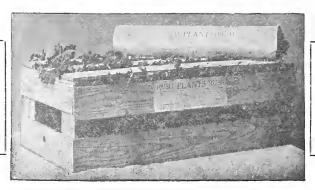
	Pkt.	oz.	1/4 lb.	lb.
Anise	\$0.05	\$0.1 0	\$0.30	\$1.00
Balm	.05	.25	.75	2.50
Sweet Basil	.05	.25	.75	2.50
Borage	.05	.10	.30	1.00
Caraway	.05	.10	.25	.75
Coriander	.05	.15	.25	.75
Dill	.05	.10	.30	1.00
Sweet Fennel	.05	.15	.25	1.00
Horehound	.05	.30	1.00	3.00
Lavender	.05	.25	.75	2.50
Sweet Marjoram	.05	.25	.75	2.50
Rue	.05	.30	1.00	3.00
Sage	.05	.20	.50	1.50
Summer Savory	.05	.30	1.00	3.00
Thyme	.05	.30	1.00	3.50
Curled Chervil	.05	.20	.50	1.50
Saffron	.05	.20	.50	1.75
Mint	.25			
Tansy	.10	.30	1.00	3.50

3.50

Scott's Vegetable and Flowering Plants

WHY TAKE CHANCES ON YOUR CROP WHEN YOU CAN BUY STRONG TRANS-PLANTED PLANTS, GUARANTEED TO REACH YOU IN GOOD GROWING CONDITION

All the leading varieties are grown. Plants are put up in well-ventilated packages, and in buying our plants you need take absolutely no chances.



Small orders, 2,000 plants or less, usually are sent by parcel post, large orders by express. We prepay the postage and express charges on all plants.

Varieties Ready March 15 to June 25

MAMMOTH PANSIES (in bloom). cts.; 3 doz., \$1.00; 100 for \$2.85.

EARLY BEETS, Early Sure-Go, Early Eclipse.
Doz., 10 cts.; 4 doz., 35 cts.; 100, 65 cts.; 500
\$2.00; 1,000, \$3.50.

EARLY CABBAGE, Early Jersey Wakefield, Copenhagen Market, Early Summer. Doz., 15 cts.; 4 doz., 50 cts.; 100, 90 cts.; 500, \$3.50;

EARLY SNOWBALL CAULIFLOWER. 20 cts.; 3 doz., 50 cts.; 100, \$1.00; 500, \$3.75; 1,000, \$6.75.

BIG BOSTON LETTUCE. Doz., 10 cts.; 4 doz., 35 cts.; 100, 65 cts.; 500, \$2.00; 1,000, \$3.50.

TOMATO, Sparks' Earliana, Hillborn's Globe, Early 4th of July, Bonnie Best, Livingston's Stone, Dwarf Stone, Chalk's Early Jewel, Matchless, Ponderosa. Doz., 15 cts.; 4 doz., 50 cts.; 100, 90 cts.; 500, \$3.50; 1,000, \$5.50.

Scott's Favorite Plant Collection

A complete family garden, 12 dozen plants (actual value, \$1.50), Parcel Postpaid, for only \$1.00.

3 doz. Early Beets
2 doz. Early Cabbage
1 doz. Early Cauliflower
1 doz. Early Tomato 1 doz. Main Crop Tomato

This collection consists of the best varieties, and is arranged to give you a nice succession of fresh vegetables throughout the entire summer. Much valuable time is saved when a large number of orders can be put up exactly alike. In buying this collection, you receive the benefit of this sav-

Ready May 1

EGGPLANTS, New York Spineless, Black Beauty. Doz., 25 cts.; 3 doz., 65 cts.; 100, \$1.50; 500, \$4.75; 1,000, \$8.75.

PEPPERS, Ruby King, Chinese Giant. Doz., 20 cts.; 3 doz., 50 cts.; 100, \$1.00; 500, \$3.75, 1,000 \$6.75.

EARLY CELERY, White Plume, Golden Self-bleaching. Doz., 10 cts.; 4 doz., 35 cts.; 100, 65 cts.; 500, \$2.75; 1,000, \$4.50.

SWEET POTATO, Yellow Nansemond. Doz., 10 cts.; 100, 45 cts.; 500, \$1.75; 1,000, \$2.90

Why Not Plant Some Asters?

They Will Add to Your Pleasures and Increase Your Profits

The Queen of the Market Aster is easily grown, and usually is in full bloom two weeks before most other sorts. The blooms are produced on good long stems in great abundance.

Several hundred plants oftentimes could be planted in spare corners. This would greatly improve the appearance of the surroundings and the blooms can be sold for profit.

offer: White, Pink, In separate colors we Crimson, and Dark Blue.

Our Mixture consists of a wide range of many of the most beautiful colors that will surely please you.

Doz., 10 cts.; 4 doz., 35 cts.; 100, 65 cts.; 500, \$2.00; 1,000, \$3.50.

Ready May 1

FANCY LARGE-LEAVED COLEUS. 6 for 35 cts.; doz., 50 cts.; 100, \$3.75.

SCARLET SAGE. 6 for 35 cts.; doz., 50 cts.; 100, \$3.75.

FIELD-GROWN PLANTS

Millions of Field-grown Plants are grown and shipped to almost every state in the Union. The improved methods of growing, digging, and packing our plants insure your satisfaction. Field-grown Plants are usually ready at the dates specified. Exceptional weather conditions sometimes make it necessary for us to hold orders a few days, but you can always expect safe arrival of good stocky plants that will be profitable to

Ready May 25

CABBAGE, Succession, Flat Dutch, Copenhagen Market, Danish Ballhead, Surehead, Stonehead. Doz., 10 cts.; 3 doz., 25 cts.; 100, 45 cts.; 500, \$1.00; 1,000, \$1.50; 5,000, \$6.90.

SNOWBALL CAULIFLOWER. Doz., 15 cts.; 2 doz., 25 cts.; 100, 50 cts.; 500, \$1.85; 1,000, \$2.85; 5,000, \$12.75.

Ready June 10

TOMATO, Early 4th of July, Chalk's Jewel, Bonnie Best, Livingston's Stone, Ponderosa. Doz., 10 cts.; 4 doz., 35 cts.; 100, 55 cts.; 500, \$2.25; 1,000, \$3.50; 5,000, \$14.85.

Ready June 25 CELERY, Golden Self-bleaching. From French seed. Doz., 10 cts.; 4 doz., 35 cts.; 100, 55 cts.; 500, \$1.85; 1,000, \$2.85; 5,000, \$12.75.

CELERY, White Plume, Giant, Pascal, Winter Queen. Doz., 10 cts.; 3 doz., 25 cts.; 100, 45 cts.; 500, \$1.25; 1,000, \$2.00.

Mixed Lawn Grass Seed

This is an extra-fine mixture of recleaned Grass Seed of the varieties that are best adapted to general lawn sowing. In making up this mixture it was our aim to make a formula that would produce a durable and lasting lawn, withstanding the extreme heat of the summer, the cold and frost of winter, as well as periods of drought and moisture that mark our Pennsylvania climate. We believe the testimony of our customers will prove that we have succeeded in our efforts, and a lawn that is sown with our Lawn Grass Mixture will show a rich, velvety appearance in five to six weeks after sowing. The mixture is absolutely pure and contains no chaff or "filler" of any kind. A measured bushel will weigh about twenty-seven pounds, and about 75 lbs. will be required to seed an acre of lawn. About 10 pounds will be required for an average city lot, measuring 30 by 100 feet; this will give a good liberal seeding. Less than 10 lbs., 25 cts. per lb.; 10 lbs., \$2; 25 lbs. and over, 18 cts. per lb. If wanted by mail add postage at your zone rate, according to the table on inside of front cover. Special prices will be quoted on large quantities.

SHADY LAWN MIXTURE

This mixture is made from Grasses which will thrive under the shade of trees and buildings, where comparatively little sun reaches the ground, and in places where ordinary Grasses will not succeed. The quantity of seed required for sowing is practically the same as for our Lawn Grass Mixture. Less than 10 lbs., 35 cts. per lb.; 10 lbs. and over, 30 cts. per lb. If wanted by mail, add postage at your zone rate, according to the table on the inside of front cover.

PUTTING-GREEN MIXTURE

Our Putting-Green Mixture is made from selected stocks of those European and American Grasses which have proved the best for the purpose. As we import large quantities of Grasses, we are well equipped for preparing special Golf-Course Mixtures. Less than 10 lbs., 40 cts. per lb.; 10 lbs., \$3.50; 20 lbs. and over, 30 cts. per lb. If wanted by mail, add postage at your zone rate, according to the table on inside of front cover.

FLOWER SEEDS

At the prices named in this catalogue we pay the postage on all Flower Seeds in packets, ounces, quarter-pounds, pounds and upward.



We have given a little more than our usual attention to the Flower Seed Department, and for this season we have made some radical changes in the list. Practically all of the varieties listed here are "Annuals," that is, plants which grow, produce flowers, mature the seed, and die the same year. We believe this class of plants to be more satisfactory, in general, to the average gardener. If one desires perennials, or those plants which live from year to year, we would suggest that the plants themselves be purchased, although a great deal of the pleasure in gardening will be lost if you do not raise the plants from the seed.

the plants from the seed.						
Pkt.	½ oz.	1 oz.	P	kt.	½ oz.	1 oz.
Ageratum, Blue Perfection\$0.05		\$0.45	Begonia, Mixed Everblooming			
Ageratum, Dwarf Blue Nanum05	.15	.25	varieties	.25		
Alyssum, Sweet Benthami05			Calendula, or Pot Marigold, Dou-			
Alyssum, Little Gem	.25	.40	ble Mixed	.05	.15	.25
Amarantus, Tri-color (Joseph			Calliopsis. Dwarf Varieties Mixed	.05	.15	.25
Coat)			Canary-Bird Vine	.05		.25
Asters, Queen of Market Mixed 10		1.25	Candytuft, Giant Empress	.05		.25
Asters, Semples Branching Mixed .10	.75	1.25	Cannas. Dwarf Large Flowering			
Asters, Semples Branching Pure	e1 00	01.75	Mixed	.10	.20	.35
White\$0.10	\$1.00	ФТ.19	Canterbury Bells, Single Mixed	.05		.25
Asters, Semples Branching Dark	75	1.25	Cardinal Climber	.25	_	
Blue	.10	1.20	Carnation, Marguerite Finest	.20	• • • •	•••
Asters, Semples Branching Light Rose	.75	1 95	Mixed	.10	.40	.75
Asters, Semples Branching Crim-	.10	1.20	Castor Beans, Ricinus Zanziba-		• 20	
son\$0.10	\$0.75	\$1.25	riensis	.05	.10	.15
Balloon Vine			Castor Ricinus, Finest Mixed	.05	.10	.15
Balsam, Double Finest Mixed05		1.2	Clarkia elegans flpl	.05	.15	.25
Begonia, Vernon			Celosia Cristata, Cockscomb Fin-			
Begonia, Vulcan			est Mixed	.05	1.25	2.25
-0						

FLOV	VER	SEE	DS—Continued
	½ oz.	1 oz.	Pkt. ½ oz. 1 oz.
ton\$.05	5 \$.15	\$.25	Moon Flower, (Ipomoea Grandi- flora)\$.10 \$.40 \$.75
Centaurea Imperialis08		.45	Mourning Bride, Scabiosa Mixed05 .30 .50
Chrysanthemums, Finest Double	.25	.45	Morning Glory, Finest Mixed
Mixed		.45	Morning Glory, Giant Japanese
Coleus, Hybridus			
Columbine Aqulegia, Finest Mixed .08		.45	Nasturtium, Dwarf Fine Mixed
Coreopsis		.45 .45	Nasturtium, Tall Fine Mixed
Cosmos, Early Flowering, Mixed09		.45	
Cosmos, Mam. Finest Mixed0		.40	Nicotiana, Sanderae
Cypress Vine, Mixed		$\begin{array}{c} .25 \\ \textbf{1.00} \end{array}$	Pansy, Finest Mixed
Daisy, Double Mixed		2.50	Pansy, Cassiers Mixed
Dahlia, Double Mixed	0 .75	1.40	Peas, Everlasting Mixed
Eschscholtzia (California Poppy) Mixed	5 .25	.40	Petunia, Single Dwarf Immitable
Euphorbia Variegata	5 .15	.25	Mixed
Four O'Clock Mixed (Marvel of	5 1.00	1.75	Petunia, Single Fine Mixed05 .75 1.25
Peru)	5 .10	.15	Petunia, Double Fringed Mixed25
Fox Glove, Mixed (Digitalis)0	5 .15	.25	Phlox, Drummondi Finest Mixed05 .65 1.00 Phlox, Nana Compacta10 1.25 2.00
Gaillardia, Grandiflora Mixed0. Globe Amaranth (Gomphrena)	5 .30	.50	Pinks, China Double Mixed05 .40 .75
Mixed	5 .25	.45	Pinks, Japan Single Mixed05 .20 .35 Poppy, Shirley05 .20 .35
Gourds Mixed (Ornamental)0	5 .10	.15	Poppy, Tulip Flowered
Gourds, Dish Rag	5	.10	Poppy, Double Fine Mixed05 .15 .25
Gourds, Dipper		.10	Poppy, Orientale
	5	.10	Portulaca, Single Mixed
Gourds, Mixed	5	.10	Portulaca, Double Mixed10 1.50 2.75
Gypsophila		.15	Primula, Fine Mixed (Cowslip)
Helichrysum Monstrosum, Double	- 15	. 05	White
Mixed		.25 .90	Pyrethrum, Golden Feather05 .25 .45 Rhodanthe Mixed05 .25 .45
Helianthus Purpureus	0 1.25	2.00	Rhodanthe Mixed
Hollyhock, Finest Double Mixed1 Humulus Japonicus			Salvia, Splendens
Humulus Japonicus		.25 .25	Salvia, Bonfire .10 1.75 2.50 Salvia, Zurich Dwarf .10 1.75 3.00
Hyacinth Beans, Mixed (Dolichos) .0	5 .10	.15	- Snapdragon, Tall Large Flower-
Ice Plant			ing Mixed
Job's Tears			Stocks, Dwarf German Ten Weeks .10 1.25 2.25 Sunflower, Double Chrysanthemum
Larkspur, Double Dwarf Rocket	.10	.20	Flowered
Mixed			Sunflower, Cucumerifolius Minia-
Lobelia			ture
Mignonette, Sweet Odorato0		.15	Sweet William, Double Mixed10 .40 .75
Mimulus, Moschatus (Musk Plant) .0 Momordica Charantia (Balsam	5 .75	1.25	Verbena Extra Fine Mixed
Pear)	5 .15	.25	Verbena, Choice Mixed
Momordica Balsamina (Balsam			Wild Cucumber
Apple)			Zinnia, Dwarf Elegans Mixed05 .25 .40 Zinnia, Tall Elegans Mixed05 .25 .40
SPENORD VARIETIES	SV	VEE'	r PEAS
SPENCER VARIETIES Pkt. oz.	1/. 1h	. 1b.	Pkt. oz. ¼ lb. lb. Dainty, White and Pink\$0.05 \$0.10 \$0.30 \$1.00
Pkt. oz. Asta. Ohn. Pinkish Lavender \$0.10 \$0.3			Emily Henderson, Pure White .05 .10 .30 1.00
	0 1.00		Hon. Mrs. E. Kenyon, Large
	0 1.00		Primrose
	30, 1. 00 30 1. 00		Lady Grisel Hamilton, Beau-
Primrose Spencer, Pure Prim-			tiful lavender
	1.00 5 $.75$		Lord Nelson, Deep Navy Blue .05 .10 .30 1.00 Navy-Blue, Indigo and Violet .05 .10 .30 1.00
		4.00	Othello, Deep Maroon05 .10 .30 1.00
GRANDIFLORA VARIETIE Blanche Ferry, Carmine Rose	. J.		Prima Donna, Pink05 .10 .30 1.00 Queen Alexandra, Scarlet05 .10 .30 1.00
	LO .30	1.00	Romolo Piazzani Bright
Coccinea, Cherry Red05 .1	.30	1.00	Purple
Dorothy Eckford, Pure White .05 .1	.30	1.00	Eckford's Finest Mixture05 .10 .25 .75

SUMMER-FLOWERING BULBS

CALADIUMS, or Elephant's Ears | GLADIOLUS (Continued)

				each	doz.	100
5	to	7	inches	circumference\$0.04	\$0.35	\$2.50
7	to	9	inches	circumference05	.50	3.50
9	to	11	inches	circumference10	1.00	7.00
11	to	13	inches	circumference20	2.00	14.00
13	to	15	inches	circumference30	2.50	20.00

If wanted by mail, add for postage, 6c per doz. for 5- to 7- and 7- to 9-in. bulbs, 15c. per doz. for 9- to 11- in. bulbs, and 25c per doz. for 11- to 13- and 13- to 15-in. bulbs.

CANNAS

ea	ach	doz.	100
Alphonse Bouvier, Clear Crimson \$6	0.08	\$0.90	\$6.00
Augusta, Bright Crimson	.10	1.00	7.00
Burbank, Sulphur-Yellow	.08	.90	6.00
Chas. Henderson, Brilliant Scarlet	.08	.90	6.00
Crimson Bedder, Fine Crimson	.10	1.00	7.00
Egandale, Currant-Red	.08	.90	6.00
Ex. Crampbell, Rich Crimson	.10	1.00	7.00
Florence Vaughan, Fine Yellow	.08	.90	6.00
Golden King, Fine Yellow	.08	.90	6.00
Mlle. Berat, Deep Rose-Pink	.08	.90	6.00
King Humbert, Fine Orange Scar-			
let	.10	1.00	7.00
Madame Crozy, Vermilion-Scarlet	.08	.90	6.00
By mail add 10c per dozen	ext	ra.	

CINNAMON VINE

		each	doz.	100
Cinnamon	Vine	 .\$0.05	\$0.50	\$4.00

GLADIOLUS

each	doz.	100	
America, Pale Silvery Shell Pink	40.05	A 2 0 0	
(Extra Select)\$0.04	\$0.35	\$2.00	
Augusta, lovely pure white04	.35	2.00	
Mrs. Francis King, Bright shade			
of Pure Scarlet	.35	2.00	
Niagara Canary, Yellow	.90	6.00	
Pink Beauty, Bright Pink	.50	3.00	
Princeps, Beautiful Scarlet04	.35	2.00	
Halley, Salmon Pink	.50	3.00	
Brenchleyensis, Scarlet (Extra			
Select)	.35	2.00	
Baron J. Hulot, Violet Blue (Ex-			
tra Select)	.50	3.00	
Hollandia, Delicate Yellow (Ex-			
tra Select)	.60	3.50	
Finest Mixed Extra Large Bulbs03	.25	1.50	

Glory of Holland, large, pure white \$			
Empress of India, dark brown-red	.06	.60	3.50
Willy Wigman, soft rose with			
blood-red blotch	.04	.35	-2.00
Panama, excellent pink	.08	.75	5.00

If Gladioli bulbs or Cinnamon Vines are wanted by mail, add 8c per dozen for postage.

TUBEROSES

each	doz.	100
White Pearl, first size\$0.03	\$0.25	\$1.50
White Pearl, mammoth	.35	2.00
By mail, add 10c per dozen	extra.	

MEDEIRA VINE ROOTS

						each	doz.	100
Select	Larg	e Bul	bs .			\$0.04	\$0.35	\$2.50
	$\mathbf{B}\mathbf{y}$	mail,	add	8c	per	dozen	extra.	

DAHLIA ROOTS **Cactus Varieties**

each	doz.
J. H. Jackson, Dark Crimson\$0.15	\$1.50
Juliet, Rosy pink shading to white cen-	
ter	1.50
Master Carl, large clear salmon15	1.50
Mrs. George Stevenson, Sparkling	
Bright Yellow	1.50
Mrs. H. J. Jones, Bright Scarlet	
Tipped White	1.50
Kriemhilde, Brilliant Pink	1.50
Lawine, Blush White	1.50

DAHLIA ROOTS Show and Decorative Varieties

	each	doz.
Arabella, Pale Primrose	\$.15	\$1.50
A. D. Livoni, Rich Seashell Pink	.15	1.50
Black Diamond, Purple-Garnet, shad-		
ing Black	$^{1.15}$	1.50
Storm King, Pure White	.15	1.50
Queen of Yellows, Pure Yellow	.15	1.50
Bon Ton, Deep Rich Garnet	.15	1.50
Orange King, Rich Glowing Orange	.15	1.50
Ruby Queen, Clear Ruby Red	.15	1.50
If wanted by mail add 5c each, or 25c	per	dozen
to the above prices.		

PEONY ROOTS

Rubra	Plena, t	$^{ m he}$	old-f	${f a}$ shi ${f o}$	ned,	deep		
red;	early					\$0	.15	\$1.50
Rosea,	fine pin	k.					.15	1.50
Mutabi:	lis, whit	е.					.15	1.50

Our Fall Bulb Catalogue We issue a catalogue of Bulbs for Fall Planting about September 1. This catalogue will be mailed free to all who request it. We import our own bulbs direct from the growers in Holland, and they are from the best stocks in that country. These bulbs comprise the very best varieties of Hyacinths, Tulips, Narcissus, Crocus and all the flowers which make such a glorious show in the garden in spring. Send for our catalogue now, and your name will be put on our mailing list; the catalogue will then be sent to you as soon as issued.

FIELD SEEDS AND GRAINS

THIS DEPARTMENT OF OUR BUSINESS HAS ALWAYS RECEIVED SPECIAL

ATTENTION

The Grains and Grass Seeds we offer are selected with special reference to their purity and germination, and great care is used to have them free from noxious foreign seeds.

The Pennsylvania Pure Seed Law, which went into effect January 1, 1914, contains the following provisions: "That no seeds offered for sale shall contain dodder or Canada thistle in excess of one seed in 3,000."

It also provides that Red Clover, Crimson Clover, Alfalfa, Timothy, Barley, Speltz, Wheat, Buckwheat, Oats and Rye shall be 97 per cent pure; Alsike Clover, Perennial Rye Grass, German and Hungarian Millet 95 per cent; White Clover 90 per cent; Red-Top, solid seed, 85 per cent; Blue Grass, Orchard Grass and Unhulled Red-Top 75 per cent.

Every dealer in seeds who is desirous of giving the farmer a square deal is pleased to see such a law enacted, and the farmer, in buying his seeds, should ask for the percentage of purity.

While we handle more than one grade of some varieties of seeds, our lowest grade will always be found to more than meet the requirements of this law. However, we always advise our customers to purchase our highest or "Special" grades, which are the cheapest in the end.

Our Special Seed Price List

Owing to the frequent changes in the market prices of Field Seeds and Grains, in justice to our customers, as well as ourselves, we cannot name prices in this catalogue. We, however, issue a Special Seed Price List covering all our Field Seeds and Grains, which is corrected as market changes occur. A postal will bring this price-list, also samples when requested.

TIMOTHY

A description of this old familiar hay-making grass is unnecessary here. It is recognized by almost everyone wherever found, and is probably the most extensively grown of all the grasses. It may be sown alone or with Red or Alsike Clover, or with other grasses. From twelve to fifteen pounds of seed are usually sown to the acre. While we handle three grades of Timothy, the lowest of which runs over 98 per cent pure, we recommend our highest or "Special grade, which, during the past season, averaged 99.8 per cent pure, never running below 99.6 per cent pure.

CLOVERS

- MEDIUM RED. More widely known than any other variety of Clover. Makes a standard Clover for hay purposes, as it can be cut at least twice in the season. Plants grow about 2 feet in height. Sow the seed in the early spring or late summer at the rate of fifteen to twenty pounds to an acre. If used with other seeds, ten pounds to an acre will be sufficient.
- MAMMOTH RED. Sometimes called Sapling or English Clover. It is much ranker than the Medium Clover, and yields a much larger crop per acre. It does well on poor soil, is hardy, and usually will stay in the ground longer than Medium Clover. Seed cannot be distinguished from that of Medium Red by its appearance.

CLOVERS—Continued

- ALFALFA. One of the most nutritious plants grown; valuable as a dried hay or for pasture. With proper cultivation it can be grown on some part of almost any farm in Pennsylvania or adjoining states. Two or three cuttings can be made in a season, producing from three to five tons of hay per acre. Ton for ton its feed value equals that of wheat bran. From twenty to twenty-five pounds of seed are usually sown to the acre. Some farmers sow thirty pounds to the acre. We sell but one grade of Alfalfa seed, the very best northwestern Americangrown.
- ALSIKE. One of the best for sowing with Timothy. The seed may be planted in spring, late summer or early autumn, and as the plants are perfectly hardy, the field seldom requires re-seeding. The flowers resemble White Clover, but have a red tinge on the edge of the petals and are considerably larger. Thrives better on thin soils than Red Clover.
- WHITE. White Clover is specially valuable for lawn planting and is likewise good for pasturage. When sown with Lawn Grass it helps to make a permanent turf; in the pasture it is not quickly destroyed by hoofs of cattle and horses. Seed can be sown any time during the summer, although best results are obtained from early spring sowing. It is perfectly hardy and very thrifty. Use from ten to twelve pounds to the acre if sown alone; about five pounds to the acre if sown on old sod or with other Clover.
- CRIMSON. This Clover is used principally for turning under as a green fertilizer, or for sowing with corn for a winter cover-crop. If desired for feed, the plants should be cut just before they come into bloom. Seed may be sown any time after the first of April at the rate of twenty pounds to the acre. Plants are strictly annual, therefore, the field must be re-seeded every year. Thrives on poor land and increases fertility of the soil.
- SWEET. Also known as Bokhara or Melilotus. This is a legume whose value as a soil improver is just beginning to be appreciated. It is also used for forage, but on account of its taste, the cattle take to it very slowly. It can be grown on soil that is too poor to grow other legumes, and it is claimed the bacteria on its roots will inoculate Alfalfa. It may be sown either in the spring or fall. Although a great number of different species are grown in the Old World, the three principal varieties used in this country are the white biennial (Melilotus alba), the large yellow biennial (Melilotus officinalis) and the small yellow annual (Melilotus Indica). The latter variety is often substituted for the large yellow biennial, and is considered of very little value. We can furnish seed of the first two varieties.

GRASS SEEDS

BLUE GRASS. Kentucky Blue Grass is most valuable for pastures and lawn planting. lawns it is indispensable and, when well established, the lawn will last for years, as the Grass makes an extra-close fine-textured turf. The seed should be mixed with other Grasses that mature earlier for Blue Grass is very slow in both germinating and maturing.

FIELD SEEDS AND GRAINS—Continued

GRASS SEEDS—Continued

- ORCHARD GRASS. A quick-maturing Grass that is used for pasture and hay. It may be cut several times during the year, but it is advisable to use the machine before the plants show the seed-heads. From thirty to thirty-five pounds will be required for an acre.
- RED-TOP. A valuable Grass for hay, pasture or lawn. It will grow on any soil that is not extremely dry. With the possible exception of Kentucky Blue Grass, it surpasses all other Grasses for lawn-making, and is an extra-good variety for golf-grounds and other places where the turf must withstand hard usage. About fifteen to twenty pounds of seed will be required for an acre. We handle nothing but the solid seed, having discarded the unhulled and chaff grades.
- HARD FESCUE. Grows well in dry, sandy soils, and is especially good for pasturage and haying; stands extremes of cold and heat. About thirty pounds will be required for an acre.
- RED FESCUE. This is commonly called Creeping Fescue. It is largely used in sandy soils, but will grow well on even the poorest land. It is good for hillsides, embankments and shady places. About thirty-five pounds of seed will be required for an acre.
- VARIOUS-LEAVED FESCUE. A good variety to grow in orchards, as the plants thrive best in shady, moist situations. The plants are from 2 to 3 feet high and quite hardy. About forty pounds of seed will be required for an acre.

- WOOD MEADOW GRASS. Will grow in shady places where practically no other Grass will succeed, and therefore is particularly desirable for shaded lawns. It is also desirable for mixing with golf-link Grasses, as it makes a compact turf. About thirty-five pounds of seed for an acre.
- SHEEP'S FESCUE. A Grass that will grow on poor soil where most other sorts would die from lack of nourishment. It always stands severe droughts and long, cold winters. It makes excellent pasture Grass, and can also be used for the lawn when combined with other Grasses. About forty pounds will be required for an acre.
- CRESTED DOG'S-TAIL. A low-growing Grass that makes extra-dense turf in rich, moist soils; is also desirable for putting-greens and lawns. Will grow equally well in the shade or the sun. About seventy pounds of seed will be required for an acre.
- RHODE ISLAND BENT. A superior Grass for putting-greens on account of its dwarf growth and its narrow leaves. It will grow and make good turf in good or bad soils, and dry weather or heavy rains seems to have no serious effects. About forty pounds of seed are required for an acre.
- PERENNIAL or ENGLISH RYE GRASS. Where a rapid growth is desired, this is the Grass to sow, as it will make a reasonably good showing when three or four weeks old. It is extensively used in lawn seed mixtures. About seventy pounds of seed will be required for an acre.

MISCELLANEOUS FARM SEEDS

- COWPEAS. One of the best soil-enrichers, taking the nitrogen from the air and storing it in the soil; valuable also for hay, forage, ensilage or turning under. Will grow on poor land and even though the crop is taken off the soil is enriched and following crops do better. All things considered, there is probably no surer or cheaper method of bringing up poor soils than by a liberal sowing of Cowpeas. They should be sown in this latitude in May or June, using, when sown broadcast, one and one-half to two bushels to the acre. Many different varieties are grown in the United States but those most suitable for sowing in the North are the following:
 - Whippoorwill. This is the most popular variety in the North; ripens early and is very productive.
 - New Era. An extra-early variety, maturing in about sixty days.
 - Mixed Varieties. This mixture consists of a half-dozen or more of the leading varieties, and is usually sown for hay, pasture or turning under. They are almost sure to make a heavy growth.
- CANADA FIELD PEAS. A crop of great value and increasing in popularity every year. Used for hay and pasture as well as soil-improvement. Canada Field Peas should be sown as early as possible in the spring, either alone or with oats.

- When sown broadcast alone at least two bushels of seed to the acre should be used, or with oats, one and one-half bushels of Peas and one bushel of oats.
- soy beans. Sometimes called Soja Beans. Another valuable plant for bringing nitrogen into the soil. It is also excellent for green or dried fodder, and the seed is very rich in protein, making an excellent dairy feed when balanced with other grains. Seed should be sown during the months of May or June, using at least one bushel to the acre, when sown broadcast, or when sown in drills, 2½ feet apart, about three pecks to the acre. We handle three varieties—Mammoth Yellow, Medium Green and Wilson. The Medium Green and Wilson mature earlier than the Mammoth Yellow, but are smaller in growth. The Mammoth Yellow requires about 120 days to mature, the Wilson and Medium Green about twetny days less.
- DWARF ESSEX RAPE. Especially valuable for feeding sheep, hogs and cattle. Claimed to have a feed value greater than clover. Always used as a pasture and not for hay. Its growth is similar to turniptops, but heavier and taller. If seed is sown in May the field should be ready for pasture in July. However, seed may be sown either in early spring, summer or fall. If sown in drills, about five pounds of seed will be required for an acre; if sown broadcast, ten pounds to the acre.

MISCELLANEOUS FARM SEEDS (CONTINUED)

SAND or HAIRY VETCH. One of the best legumes, whether used for a hay crop, pasture, soil-improvement or cover crop. Thrives on light soils and is very hardy, remaining green throughout the winter. May be sown in the spring or fall, using from sixty to seventy pounds of seed to the acre when sown alone. It is better, however, to furnish a support for the Vetch by sowing rye, barley or oats with it at the rate of one-half bushel of grain and fifty pounds of Vetch to the acre.

SPRING VETCH. The seed of the Spring Vetch is larger than that of the Sand Vetch, but the plant is not so hardy and will not produce so large a growth. It is usually sown in the spring

for a hay crop or plowing under.

MILLET. A medium-early forage plant which will grow in almost any climate or soil and produces heavy yields of fodder. The crop should be cut while the plants are in bloom, or at least before the seed forms. Seed may be sown during the month of May or the early part of June at the rate of from thirty to forty pounds to the acre. We handle four varieties of Millet-German, sometimes known as Common Millet; Southern Tennessee, or Golden; Hungarian and Japanese.

SORGHUM, or AMBER CANE. Used principally as a summer fodder for cattle. Plants will grow rapidly and at least two crops can be cut each season. If carefully cured it will make an excellent dry fodder. The seed may be sown in drills about 30 inches apart, at the rate of five to six pounds of seed for an acre. If sown broadcast, from seventy-five to one hundred pounds of seed is generally used. Set the drills so that the seed will be sown thickly, but not

KAFFIR CORN. Used principally as a green fodder, also for seed, which is largely used as a poultry-feed. Will grow in any place where the sorghum thrives. For fodder sow one bushel to the acre; for seed, sow eight to ten pounds to the acre, in rows 3 feet apart.

heavily covered.

SUDAN GRASS. This was introduced into the United States in 1909 from Africa. It is thought to be the wild original form of our cultivated Sorghum. It is strictly an annual and dies each year like Millet. Since its introduction into this country, it has been grown extensively in the dry regions of the West and Southwest,

producing immense quantities of both seed and hay. It grows from 5 to 9 feet high, has great drought-resisting qualities, and is recommended as a substitute for millet, for a catch crop. Once started, it will grow vigorously without rain. To secure best results, it should be planted in rows wide enough to permit of cultivation. If sown in rows, 4 to 6 pounds of seed per acre is recommended or broadcast 16 to 24 pounds per acre.

BARLEY. A well-known, quick-growing cereal. We have the Beardless variety and the Wisconsin Six-Row. The Beardless is generally considered earlier and more hardy than the bearded varieties.

WINTER WHEAT. We can supply the leading sorts of Winter Wheat. Our stock usually consists of Blue-Stem, Klondike, Red Wave and other popular varieties. Write us for samples. and prices before seeding time.

SPRING WHEAT. If your Winter Wheat happens to be killed by extreme cold weather, you can still secure a crop by sowing Spring Wheat in early spring. We furnish either Fife or Blue-

WINTER RYE. Usually sown as a cover-crop, getting the seed into the ground before the middle of November. About one and one-half bushels of seed will be required for an acre.

SPRING RYE. Matures early in the season and makes an excellent green food when cut, or will supply pasturage for several weeks. Spring Rye is quite distinct from the winter sorts, as the seeds are much smaller.

BUCKWHEAT. Japanese and Silver Hull are the two leading varieties. The Silver Hull produces whiter flour, but the Japanese is most productive. The Silver Hull grows particularly well on poor soil and matures a little later than the Japanese. Seed required, one to one and one-half bushels to the acre.

SPELTZ. Resembles wheat but the grain is much larger. Very productive and makes a fine feed for stock whether it is cut green or allowed to ripen and the grain ground. The grain is particularly good for hog- and poultry-feed.

BROOM CORN (Evergreen). On account of the green appearance when ripe, also its earliness. this variety is generally used by growers of

Broom Corn.

VICTORY. This grand new Oats was originated by the Plant-breeding Society in the Province of Scania, Sweden. It is the highest development in Oats achieved by this famous institu-Everywhere, on every soil, these new Oats outweighed and outyielded every other kind; the other excellent characteristics of these Oats, distinguishing them from all others, is their ability to withstand wind and storms to a most remarkable degree, and to grow on rich, well-manured land without lodging. The grains are always very plump and heavy, weighing forty-five to lifty pounds to the measured bushel. Victory ripens early, at about the same time as the well-known Swedish Select Oats. These Oats have been yielding as high as seventy bushels to the acre here in the vicinity of Pittsburgh, and we have reports of yields from

other sections as high as one hundred bushels to the acre. Our stock is imported direct from Sweden.

MONTANA. These are grown in the state of Montana at a high altitude, and are prolific yielders in Pennsylvania climate. They are very heavy, weighing about forty-five pounds to the measured bushel, and have very stiff straw.

ALBERTA. Big, heavy-yielding Oats the seed of which comes direct from Alberta, in the great grain-growing district of western Canada. They have a big, fat kernel, and weigh almost as heavy as wheat, usually from forty-four to fifty pounds to the measured bushel. Yields as high as ninety to one hundred bushels to the acre have been reported. Have big. strong, stiff straw, standing up on any kind of land with long, sprangled heads; ripens early.

The farmer who does not change his seed is losing his greatest opportunity in farming. It may save a few dollars in spring to plant your own seed; but when harvest time comes, and your crops run hundreds of dollars less than those of the man who was wise and purchased first-class seed, such as we sell, the short-sighted economy of the spring amounts almost to a crime.

FIELD CORN

We have always made a specialty of Seed Corn, supplying our trade with only those varieties that experience has proved are most suitable for the climate of Pennsylvania, Ohio and West Virginia. Our Seed Corn is carefully hand-picked and tipped and butted before it is shelled. We can also furnish most of the varieties on the ear when desired. We aim to have every variety true to name and of high germination.

SURE-CROP NINETY-DAY

A Truly Valuable Ninety-Day Corn

The tremendous quantity of shelled Corn this variety produces to the acre surprises everyone who grows it. Generally there are two good ears to a stalk. The grain is very long, longer than any other, and the cob very thin. Sure-Crop has a rich, deep yellow grain, making it much desired by millers. The fodder grows from 8 to 10 feet high. It is positively an early Corn, and you are always sure of a crop in the shortest season.

- GOLDEN SURPRISE. One of the best varieties for this latitude, maturing perfectly in 100 days. The stalk is of medium size. The large ears, set low on the stalk, average sixteen rows of deep grain and always mature and ripen well.
- PRIDE OF THE NORTH. A yellow Dent variety, maturing in 90 days. Ears 8 to 10 inches long, sixteen rows on the ear, cob small, grain above medium size and closely set. One of the hardiest, and especially adapted to the northern planter; will mature farther north than any other Dent Corn.
- IMPROVED LEAMING. A medium-early variety, maturing from ten days to two weeks later than Pride of the North. Especially desirable for fodder. Ears are long, with small, red cob; grains square and deep. One of the most popular varieties.
- WHITE-CAP YELLOW DENT. An early sort which grows well on light soil; grain is yellow with white tip. Nearly as early as Pride of the North, maturing in from 90 to 95 days. Ears from 8 to 10 inches long, well filled, with sixteen or eighteen rows.
- REID'S YELLOW DENT. This variety has won many prizes in Corn shows in various parts of the country. It originated in Illinois and soon became extremely popular. The cob is medium large, with good-sized, deep grain. Matures in from 100 to 110 days.

- BLOODY BUTCHER. A deep cherry-red Corn with white cap, maturing in about 90 days. Has long, slender ears, generally fourteen rows and a small cob.
- IOWA SILVER MINE. One of the most popular of the white varieties. Ripens medium-early, maturing in about 100 days. Produces extralong ears, with from fourteen to eighteen rows, of pure white kernels solidly set on the ear. A good variety for climates where droughts are frequent.

ENSILAGE CORN

EUREKA. (Virginia-grown.) The Eureka is a Virginia-bred Corn and originated about twenty years ago on the rich bottom of the James River Valley where it grows to perfection, often attaining a height of 16 to 18 feet. It is a vigorous grower, large stalks, with unusually heavy foliage, and produces from one to three ears to the stalk, according to the land. The ears average about 11 inches in length. Will produce more tons of ensilage to the acre than any other variety.

EUREKA. (Ohio-grown.) Same as above, except the seed stock is grown in the state of Ohio, and is guaranteed true and clean.

VIRGINIA GOLDEN DENT. A new variety of Ensilage Corn grown in Virginia and becoming very popular in the northern states. Although not quite so large as the Eureka, it matures about three weeks earlier, and consequently makes better ensilage in the North, especially in late seasons. We can highly recommend it to those who are partial to a yellow Corn and want a variety that is earlier than Eureka.

VIRGINIA HORSE-TOOTH. The popular fodder Corn of the southern states; from 12 to 14 feet high, and stiff enough to stand up during severe storms. The seed is white, broad and deep, with white cob. One of our most popular varieties for ensilage.

RED-COB. A tall-growing plant, with a great quantity of side leaves, making it a very desirable kind for ensilage purposes. A favorite with a great many growers. The grain is narrow and clear white.

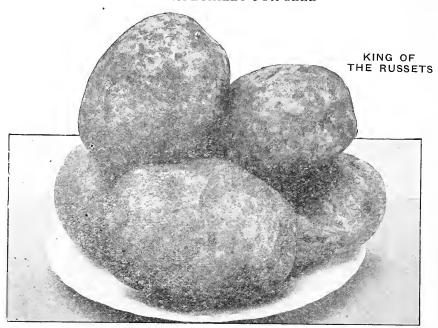
WRITE FOR OUR SPECIAL PRICE LIST COVERING ALL OUR FIELD SEEDS AND GRAINS.

Our VEGETABLE AND FLOWER SEEDS are grown for us by the most reliable and experienced growers in Europe and America. Our customers will find them true to name and of high quality. Prices on these will be found on pages 59 to 68 of this catalogue, and to all who request it, we will send our special VEGETABLE AND FLOWER SEED catalogue which gives full descriptions of the different varieties and directions for culture.

Our POULTRY SUPPLY Department includes a full line of the latest improved requisites for Poultry Raising and Egg Production, including an unsurpassed line of poultry feeds. These are fully described in our 76-page supply catalogue, which will be mailed free on request.

NORTHERN GROWN SEED POTATOES

GROWN ESPECIALLY FOR SEED



For many years we have made a specialty of supplying our trade with northern-grown seed Potatoes, and have enjoyed a largely increased trade from year to year. This we attribute to the fact that our stock is especially grown for seed, by experienced growers in the cold northeast, and, being pure and true to name, produces a much finer quality, than the home-grown and western stocks usually sold in the open market for seed purposes.

EARLY VARIETIES

SCOTT'S EXTRA-EARLY. A variety that is a heavy yielder of clean, white-skinned Potatoes. The first of the crop will be ready the latter part of June, and even the earliest Potatoes are of good size. Of extra-fine flavor and adapted to heavy soils. Pk. 90 cts., bus. \$3.25, bbl. \$8.50.

EARLY BOVEE. A very early and popular Potato of the Rose class. Produces a large quantity of tubers, uniform in size, and of excellent quality. Pk. 90 cts., bus. \$3.25, bbl. \$8.50.

EARLY SIX WEEKS. A very early Potato, somewhat resembling the Early Ohio. Pk. 90 cts., bus. \$3.25, bbl. \$8.50.

EARLY ROSE. This is genuine stock of the old standard Early Rose Potato. Although one of the oldest varieties, it still retains its popularity. Pk. 90 cts., bus. \$3.25, bbl. \$8.50.

BEAUTY OF HEBRON. A Potato that has been known and grown for years, yet it holds its place against all the newer sorts. Smooth, roundish oblong: shallow eyes indicate the type of the tubers. Fk. 90 cts., bu. \$3.25, bbl. \$8.50.

EARLY OHIO. A sort that is well known by market-gardeners who are after a first-early Potato for home trade; the tubers are almost round, with pink skin and of excellent quality. Pk. 90 cts., bus. \$3.25, bbl. \$8.50.

EARLY EVERETT. An extra-good-yielding early Potato; tubers are pink, of medium size and of excellent quality. Pk. 90 cts., bus. \$3.25, bbl. \$8.50.

IRISH COBBLER. An extra-early, round, white

IRISH COBBLER. An extra-early, round, white Potato. Vines yield heavily and the tubers are of extremely fine quality. Pk. 90 cts., bus. \$3.25, bbl. \$8.50.

We begin shipping Seed Fotatoes as early in the spring as weather conditions will permit, usually the latter part of March. However, we urge our customers to place their orders early, while our stock of all varieties is complete, as it frequently happens that we are unable to supply certain varieties late in the season. Owing to the perishable nature of Seed Potatoes the market is subject to radical changes, and it is impossible for us to guarantee prices; therefore, the prices given here are subject to change. Special prices will be quoted on five-barrel lots and upward on request. Each barrel contains 165 lbs. of full-sized tubers.

LATE VARIETIES

King of the Russets

A NEW LATE POTATO

ed to be one of the leading main-crop varieties in that it is an exceptionally heavy yielder, table quality of the very best, and with smooth, velvety, russet skin and shallow eyes. No Potato can surpass it in uniform and handsome appearance. It is very fine-grained, cooks as white as flour, and is of splendid flavor; an excellent keeper and retains its good eating qualities until late in the spring. It is one of the hardiest varieties known and is not susceptible to rot, scab or disease; in fact it can be grown on the most heavily manured land without danger of rot. Its great productiveness, handsome color and resistance to diseases make it a very popular Potato and one especially suited to our locality. Pk. 90 cts., bus. \$3.25, bbl. \$8.50.

CARMAN No. 3. Extra large, oblong, slightly flat, white. Vines are extra-good growers and yield an immense quantity of tubers of uniform size. One of the best late varieties; of excellent quality; good keeper. **Pk. 90 cts., bus. \$3.25, bbl. \$8.25.**

SENECA BEAUTY. Very smooth, of uniform size, productive, of excellent quality and a fine keeper. Pink in color and has few eyes. Pk. 90 cts., bus. \$3.25, bbl. \$8.25.

STATE OF MAINE. Flat, inclined to be oval, white-skinned. A good cropper and popular. Pk. 90 cts., bus. \$3.25, bbl. \$8.25.

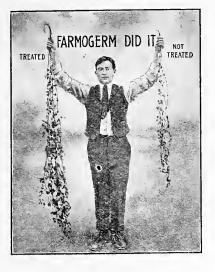
SIR WALTER RALEIGH. The tubers vary from round to oblong in shape; uniformly of good size, white-skinned and of excellent quality. A good keeper and like Carman No. 3, a very heavy yielder. Pk. 90 cts., bus. \$3.25, bbl. \$8.25.

FARMERS' DELIGHT. Very productive; uniformly very large, round-oblong, somewhat flattened; shallow eyes; smooth, glossy white skin; good cooker, flesh very white, fine-grained. Said to be blight-proof. Fk. \$1.00, bus. \$3.50, bbl. \$9.00.

RURAL NEW YORKER No. 2. Pk. 90 cts., bus. \$3.25, bbl. \$8.25.

WHAT FARMOGERM IS

Farmogerm is a pure culture, or growth of nitrogenfixing bacteria that have been selected and bred up to transform large amounts of nitrogen from the air into soluble nitrates. These bacteria are grown in a jelly, or food, in which they remain active for long periods of time, and sent out in a bottle which admits the necessary supply of pure air, yet keeps out destructive contaminations. If alfalfa can be grown on hot, sandy land of South New Jersey, why can't you grow it?



WHAT FARMOGERM WILL DO

Unless the soil is very acid or wet, Farmogerm will:

1. Increase the yield and quality of legume crops, giving quicker growth and earlier maturity.

2. Increase the food value

of legumes.

3. Make legumes grow in new localities where they cannot otherwise be grown successfully.

4. Supply nitrates to other crops growing with the inoculated legume crop.

5. Enrich the soil for future crops, thereby increasing the permanent value of the farm. Better crops-better soil—less fertilizer—less

THE STANDARD INOCULATION. HIGH BRED NITROGEN GATHERING BACTERIA

INCREASED CROPS.

are a well established certainty in all instances where inoculations are used together with proper culture methods. Not only is the crop increased in weight, but in its richness. The U. S. Dept. of Agriculture, Bulletin No. 71, substantiates these state-ments. Why not increase your farm yields without extra labor and at practically no extra cost?

FARMOGERM ON BEANS

Kinder Lou, Ga., Jan. 11, 1913.

The Coe-Mortimer Co.,

Sales Agents for Earp-Thomas Farmogerm Co.,

Charleston, S. C.

I have had a big success this year by using your Farmogerm on pinders, peas, velvet beans and alfalfa crops. The increase from its use was from 300 to 400 per cent. This makes my third year I have used it. In this time I have tested it fully every way. It is a money maker for the farmer. I will use it again on all my crops this year.

(Signed) W. S. McRee.



of well inoculated legumes have long been determined. It is shown in Bulletin No. 71, issued by the U.S. Dept. of Agriculture that tests covering a large part of the country prove that legumes will deposit 1,000 lbs. of nitrates per acre. This means that your most expensive commercial fertilizer is absolutely unnecessary when you plant legumes that are perfectly inoculated, sown and planted in properly prepared land. FARMOGERM ON ALFALFA.

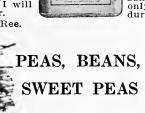
land. FARMOGERM ON ALFALFA.

LOUISIANA STATE UNIVERSITY

College of Agricultural and Agricultural
Experiment Stations.
Baton Rouge, La., Sept. 2, 1912.

Earp-Thomas Farmogerm Co.
The cultures which you sent me last year
were used and gave very good results. I
planted some of the Peruvian alfalfa on the
station ground here, and the inoculated seed
gave strong plants that lived through the
summer, while the uninoculated seed gave
only weakly plants that mostly died out
during the spring months.

(Signed) C. W. Edgerton.



SEED AND SOIL

FURNISH THTRATES TO PLANTS INCREASE THEIR GROWTH AND FOOD VALUE AND ENRICH THE SCAL

ONE ACRE SIZE EARP-THOMAS



Haif Garden Size

Yield earlier, longer and better when treated with Farmogerm. Farmogerm is endorsed by farmers, Federal and State Agricultural Departments and private estates. It is delivered to you in bottles ready for use -you can inoculate the seed for ten acres in ten minutes.

10 Soja Bean Plants

In ordering state what crop
You wish to plant; quantity
wanted, and ask for our book on Germ Method.



10 Soja Bean Plants Inoculated

REDUCED PRICES OF FARMOGERM, POSTPAID Garden Size, ¼ acre.....

FERTILIZERS

What the Crop Needs. We need to bear in mind that the great object of fertilizing is to feed the crop and not to feed the soil, and in determining what the different crops need it is important to understand the purposes served by the different elements. We are all familiar with the fact that nitrogen, phosphoric acid and potash are the three critical or vital elements of plant-food. The functions or uses of these plant-food elements are as follows:

Uses or Purposes of Nitrogen. Nitrogen builds up the young tissues in the new and rapidly growing parts of the plant, and is one of the chief constitutents of the living matter with which the minute plant-cells are filled. It increases the amount of protein, which is the muscle-making and strength-giving element of the plant when used as food. It promotes a healthy growth, gives a good green color to the foliage, and in general has a tendency to give a greatly increased growth of stems and leaves. Thus we see the necessity for using nitrogen in abundance on the grass crop, which is valued chiefly for its leaf and stem; also for such crops as lettuce and spinach, valued for their leaves, and it should also be used in abundance on crops where rapid new growth is essential, such as asparagus, rhubarb, tomatoes, etc.

Uses or Purposes of Phosphoric Acid. Phosphate of lime (consisting of phosphoric acid and lime) forms a large part of the framework of plants, just as it forms the chief constituent of the bones of the human skeleton. Plants lacking phosphoric acid die before reaching maturity. Phosphoric acid also nourishes the seeds of the plant (where it is present in great abundance) and hastens the plant's growth to maturity. It is especially used in large amounts by plants belonging to the cabbage family, including cabbages, turnips, brussels sprouts, cauliflower, kale, rape and mustard, and also by cereal crops such as wheat, barley, rye, oats, etc

Uses or Purposes of Potash. Potash is concerned especially with the formation of starch and sugar in plants and also with the development of the fleshy part of fruits, fruit juices and fruit acids. It is of great importance to corn, potatoes, beets, tobacco, strawberries, grapes, apples, and also to the leguminous crops such as clover, alfalfa, peas, beans, etc. The reason for this is very evident when you reflect that the greater part of a kernel of corn is starch, and that a potato is made up very largely of starch and water.

In the manufacture of the following Fertilizers, all these important facts are carefully borne in mind, and it is our object to furnish our customers such Fertilizers as shall produce the largest crops at the least possible cost to the consumer.

Our limited space will not permit of detailed description of the different brands here. We can give only analyses and prices. Full descriptive circulars giving detailed descriptions of the different brands and other valuable information will be mailed free.

E. Frank Coe Fertilizers

1857 The Business Farmers' Standard for Sixty Years

1917

For sixty continuous years this concern has specialized in the manufacture of high-grade Fertilizers particularly adapted to the requirements of the various crops raised in the northeastern United States. Our Fertilizers are the result of many years of practical experience in the Fertilizer business, coupled with the latest knowledge.

We manufacture a large assortment of brands particularly adapted to the farmer's requirements in western Pennsylvania and shall be very glad indeed to recommend the brand which in our opinion will give you the best returns, if you will tell us the crop which you intend to plant, the type of soil on which your farm is located, and the previous plant-food applications.

In order to assist our customers in getting the greatest possible profits from their investment in Fertilizers, we have published a series of practical booklets which should prove helpful to every farmer.

If you will write either to our western Pennsylvania agents, The I. W. Scott ('ompany, or direct to our New York office, we will mail you, free of charge, a copy of any of the following books:

"Corn, the Foundation of Profitable Farming."

"Potatoes, a Money Crop."

"Oat Production."

"The Neglected Hay Crop."

"Winter Wheat and Its Culture."

We have offered this year a reward of \$25 for the photograph of the person who has used E. Frank Coe brands continuously for the longest period of years. Many farmers in western Pennsylvania have been buying these brands for twenty or thirty years and we want to get in contact with the man who has used our goods longest. Send us his photograph and win the reward.

THE COE-MORTIMER COMPANY

51 CHAMBERS ST., NEW YORK CITY

For prices see next page

FERTILIZERS (Continued)

Gold Brand Excelsior Guano

FOR MARKET GARDENING.

(1916) --3-9-1

Guaranteed Analysis. Per Ce	nt.
Nitrogen	.29
Equal to Ammonia3.00 to 4	
Available Phosphoric Acid9.00 to 11	.00
Potash (actual)	.00
Excellent for potatoes and corn.	
In 100 lb hage	

In 100-lb. bags.

	111 100	.a. page.	
100 lbs.	\$2.50	1,000 lbs.	\$19.00
500 lbs.	10.00	2,000 lbs.	37.00

Columbian Corn and Potato

FOR CORN AND POTATOES

(1916)—1½-10-1

Guaranteed Analysis.	Per Cent.
Nitrogen	1.23 to 2.00
Equal to Ammonia	1.50 to 2.50
Available Phosphoric Acid	10.00 to 12.00
Potash (actual)	1.00 to 2.00
In 100-lb. bags.	
100 lbs \$2.25 1,000 lbs	\$16.00
500 lbs 8.50 2,000 lbs	31.00

Pennsylvania No. 1 Grain Special

FOR WHEAT, RYE AND OATS.

(1916)—1-10-1

Guaranteed Analysis.	Per Cent.
Nitrogen	.82 to 1.00
Equal to Ammonia	1.00 to 2.00
Available Phosphoric Acid	10.00 to 12.00
Potash (actual)	1.00 to 2.00
In 100-lb. bags.	
100 lbs \$2.00 1,000 lbs	\$15.00
500 lbs 8.00 · 2,000 lbs	29.00

XXV Ammoniated Phosphate

A GENERAL FERTILIZER FOR AVERAGE SOILS AND AVERAGE CONDITIONS.

(1916) -1-10-0

Guaranteed Analys	is. Per Cent.				
Nitrogen	82 to 1.65				
Equal to Ammonia	1.00 to 2.00				
Available Phosphoric Acid	10.00 to 12.00				
In 100-lb. bags.					
100 lbs\$1.50 1,000 lbs	s\$12.00				
500 lbs 6.50 2,000 lbs	s 23.00				

Muriate of Potash

None to offer. Supply exhausted.

Sulphate of Potash

None to offer. Supply exhausted.

Pure Raw Bone Meal

We guarantee this brand to be manufactured strictly from slaughter-house bone.

ANALYSIS— Ammonia	Per cent.				
Phosphoric Acid Equal to Bone Phos	21.00 to 22.00				
In 100-lb. bags					
100 lbs \$2.00	1,000 lbs \$17.50				
500 lbs 9.00	2,000 lbs 34.00				

Lawn and Greenhouse Bone Meal

Pure; ground very fine. Especially adapted for greenhouses and lawns. Made from selected bones.

A D. F. A. T. T. CO. T. CO.

ANALYSIS—	Per cent.
Ammonia	4.50 to 6.00
Phosphoric Acid	22.00 to 24.00
Equal to Bone Phos	48.07 to 52.44
In 100-lb. bags.	
25 lbs \$1.00 500 lb	os \$ 9.50
50 lbs 1.50 1,000 lb	os 18.50
100 lbs 2.50 2,000 lb	os 36.00
N1:44	1_

Nitrate of Soda

15 per cent. nitrogen, equivalent to over 18 per cent. ammonia.

In 200-lb. bags.

100	lbs.	 	4.75	600	lbs.		.\$25.50
200	lbs.	 	9.00	1,000	lbs.		. 39.00
		2,000	lbs.		\$77.0	0	

Wizard Brand Pulverized Sheep Manure

This is the strongest and best natural Fertilizer for lawns and gardens, vegetable- and fruit-growing. The raw material is the richest manure obtainable, carefully selected and treated to destroy weed seeds and produce a highly concentrated, reliable Fertilizer.

5	lbs.	\$.25	100	lbs.	 	 	. \$	1.85
10	lbs.		.40	500	lbs.	 	 		7.50
25	lbs.		.70	1,000	lbs.		 		14.50
50	lbs.	1	.10	2,000	lbs.				28.00

Acid Phosphate

Sixteen per cent. available phosphoric acid. Very quick-acting and permanent.

	In 20	0-lb. bags.	
100 lbs.	\$1.50	600 lbs.	\$ 7.00
200 lbs.	2.75	1,000 lbs.	11.00
	2,000 lbs.	\$21.0	0

Barwell's Complete Lawn and Garden Fertilizer

A pure, sure result-getting Fertilizer, rich in plant-food and pleasant to handle. Contains no adulteration or dirt filler. Composed of pure nitrate of soda, pure sulphate of ammonia, pure sulphate of potash, Peruvian guano, rose growers bone meal and gypsum. It is finely ground, almost entirely soluble in water and is all Fertilizer. Ask for directions for using. 1½-lb. can, 35 cts.; 10-lb. bag, 60 cts.; 20-lb. bag, \$1; 100-lb. bag, \$3.25; 500 lbs., \$15.50.

ABOVE PRICES ARE F. O. B. CARS PITTSBURGH.

On account of the uncertainty of the supply of raw materials all prices are subject to change (higher or lower).

Unleached Hardwood Ashes

Nature's Combination of Potash, Phosphoric Acid, Silica, Lime, and Soda. A proper and liberal use of good Hardwood Ashes will restore worn-out lands to prime fertility, preserve grass lands through severe drought, and give trees, plants and vines renewed vigor. They purify and strengthen the soil and help to eradicate noxious weeds from grass lands. They also prevent ravages of insects on plants and trees, increase the yield and quality of fruit, improve the flavor of berries, strengthen vines, and are indispensable in the growth of all crops which take large quantities of potash from the soil. Potash exists in Wood-Ashes in a readily soluble form, and being very caustic, it is an active agent in the decomposition of vegetable matter, and exerts an influence on the mechanical condition of the soil. This accounts for the prompt and often astonishing effect that applications of Wood-Ashes usually have upon plant growth, and justifies us in placing the value of this fertilizer much above the results obtained on the basis of analysis. Practical farmers tell us that unleached Wood-Ashes are worth double their analyzed value. 1 bbl., 200 lbs., \$2.25; 5 bbls., 1,000 lbs., \$10; 10 bbls., 2,000 lbs., \$18. Special prices on carload lots.

HUMUS Yeast of the Earth

The lawn, the putting-greens and fairways on the golf-course will need attention this spring. Why not benefit by the experience of others? Top-dress with Humus—"Rex Humus"—and get lasting results.

Rex Humus is not only a quick stimulant, but a permanent plant-food and soil builder. It is jet-black in color, rich in the elements of plant-food, clean and odorless, and contains no weed seed.

We know from the experience of the owners of many of the most beautiful estates in America that if you once try "Rex Humus" you will be more than pleased with the results.

You can also use it to excellent advantage in your garden and conservatory and around your trees and shrubbery.

Pamphlet and further information upon request.

100 lbs., \$1.25; 500 lbs., \$5.50; 1,000 lbs., \$9.50; 2,000 lbs., \$18.00. Carload prices quoted on request.

DAYBREAK ROCK PHOSPHATE

A Minimum of 2934% Phosphoric Acid.

The name Daybreak means superior quality, and it contains 200 to 250 pounds of phosphorus to the ton, and a fineness of 95 per cent. through 3,600 openings to the square inch. In 200 lb. bags. 100 pounds.....\$1.25 200 pounds.....\$2.25 600 pounds.....\$5.00 1,000 pounds.....\$6.75 2,000 pounds.......\$12.50 Prices by car load quoted on request.

THOMASVILLE GROUND LIMESTONE

The use of Ground Limestne is not new, but has of recent years been called to the attention of farmers by the Department of Agriculture at Washington, and through all the state agricultural colleges and experiment stations. They all urge its use.

Ground Limestone is a soil sweetener and is free from injurious qualities. It is cheaper than any other lime product which can claim to be at all competitive, and is more easily handled. There has been an enormous increase in its use in recent years, keeping pace with the growing of clover and alfalfa. Where clover does not do well it is usually because of the acidity of the soil, or rather the absence of Carbonate of Lime or Ground Limestone; a ton of clover requires 37 lbs. of Ground Limestone. Limestone, while an indirect plant food is as essential to the maximum production of some crops as is direct plant food.

Carbonate of Lime or Ground Limestone is in the most desirable form, when it is as soft as Thomasville Stone; it is very soluble, approaching in a degree Nitrate of Soda, and is particularly soluble in rain water on account of the Carbonic Acid it contains. Raw Lime or Quick Lime is expensive, and at times dangerous to plant life. The pure, soft Thomasville Limestone pulverized is a natural fertilizer always beneficial, and never harmful. It sweetens acid soils. It makes Nitrogen and Potash available. It brings clover to its maximum growth. It is in every way more beneficial than lime in any other form. It can be run through a drill, but it is best applied after plowing, merely spreading over the ground as uniformly as possible. Land poor in lime is most benefited.

Wherever its value is well understood, crop yields have been doubled in recent years through its use. This applies to wheat, as well as to alfalfa and clover. The results are most apparent in second and third years. Pulverized Limestone, used as suggested, liberates Potash where it is locked up and unavailable as plant food. It favors the production of Nitrate of Potash or Saltpetre, especially where used in soils receiving stable manure.

In addition to producing chemical changes Ground Limestone also has mechanical effects, making clay soils more friable and more open to both air and water and so less susceptible to extremes of dry and wet weather. On sandy soils the action is practically the reverse; Ground Limestone in such soils has a cementing tendency and helps the soil to retain moisture.

We recommend the free use of Ground Limestone on Lawns.

We claim that Thomasville Ground Limestone is the best on the market, on account of its unusual softness which makes it very soluble. Also because it runs uniform, never falling below 99 per cent. combined carbonates of lime.

Write for sample and descriptive circular.
Carload—20 tons, or upward, in bulk, per ton f. o. b. quarry, \$1.75. Carload—20 tons or upward, in sacks, per ton, f. o. b. quarry, \$3.25. Less than carload lots in sacks, f. o. b. cars, Pittsburgh.

100 lbs. \$.60 500 lbs. \$2.50 1,000 lbs. \$3.50 2,000 lbs. \$6.00

100 lbs. \$.60 500 lbs. \$2.50 1,000 lbs. \$3.50 2,000 lbs. \$6.00 If you will give us the name of your nearest Railroad Station we will quote you delivered prices in carload lots.

INSECTICIDES

The Insecticides and Machines for applying same described in this catalogue are not novelties in the experimental stage, but have been thoroughly tested and found reliable for the uses for which they are intended.

Customers using large quantities of Insecticides are requested to write to us for special prices specifying the quantities wanted.

BUG DEATH

Bug Death Prevents Blight and Kills the Bugs

The favorite among truckers and gardeners the past twelve years. BUG DEATH is the only insecticide and plant food in existence absolutely harmless to use which will kill bugs and insects, protect the life of the leaves and plants, increase the yield, insure highest quality, and promote vigor to plant, shrub or vine to which it may be applied. BUG DEATH is fast coming into favor for use on fruit trees, such as peach, plum and apple trees. It can be applied dry or in solution as desired. Just what is needed for melons, cucumbers, egg plant, currants, tomatoes, potatoes, etc.

PRICES.						
1 -lb.	package	\$0.20)			
3 -lb.	package		í			
5 -lb.	package)			
12½-lb.	package	1.25	,			
100 -lb.	package	8.00	١			



Pat. March 16 and Nov. 9, 1897.



Hammond's Slug Shot

The old reliable remedy for Currant Worms, Cabbage Worms, Caterpillars and other insects that destroy vines and plants.

Used from Ocean to Ocean. A light, composite, fine powder, easily distributed either by duster, bellows, or in water by spraying. Thoroughly reliable in killing Currant Worms, Potato Bugs, Cabbage Worms, Chicken Lice, Slugs, Sow Bugs, etc., and it is also strongly impregnated with fungicides.

1	1b. package\$15	Postpaid	\$0.20
5	1b. package	Postpaid	.45
25	pounds in 5-lb, packages 1.50	Postpaid	1.80

"CORONA DRY"

The Universal Insecticide

"Corona Dry" is chemically pure arsenate of lead, put up in a patent powdered form.

It is formed by the combination of lead oxide and arsenic oxide. It is all active, containing not the smallest fraction of inert material. This product contains one-third arsenic, the most effective known poison for leaf-eating insects, which is closely combined with pure lead in such a way that there is no free arsenic to "burn" the foliage.

"Corona Dry" has been used by thousands of the largest and most successful commercial growers. It can be kept indefinitely—will not freeze, dry out, cake or lose its strength.

It is a perfectly dry, fine, white powder which mixes easily and readily in water. No working up needed. Merely shake proportional amount into spray tank as needed. No waste. No straining is needed; no sediment; no lumps. Never clogs spray nozzle. Can be used in either dry or liquid form.

				•	
·½ lb. carton\$6	0.25, postpaid	\$0.30	25 lbs.	\$6.75; postpaid \$7.10	
1 lb. carton	.40, postpaid	.45	50 lbs.		
5 lb. carton	1.75, postpaid	1.85	100 lbs.	24.00	
10 lb carton	3.00. postpaid	3.20	200 lbs.	44.00	

Paris Green

1/4-lb.	Boxes,	each									\$(0.15	
1/2-lb.	Boxes,	each										.25	
1-lb.	Boxes,	each										.45	

Pure Powdered Hellebore

For destroying insects on Plants, Currant Bushes, etc.

½-lb.	Box .		 	 	 \$0.30
1-lb.	Boxes.	each	 	 	 50

Tobacco Dust

1	lb	\$0	0.10	10	lbs.		 \$0.50
5	lbs.		.30	50	1bs		 1.50
		100	lbs.		\$2.	50	

Barrel (about 150 lbs.), 21/2c per lb.

Tobacco Stems

\mathbf{P}	er Bale	-	(a	ď:)(οι	11	t	1	(t)	0	1)	bs	s.)					. 5	1.00
3	Bales																					2.25
1	Ton .																					12.00

Aphis Punk, for Fumigating

Specially prepared for greenhouses and conservatories. It vaporizes the nicotine economically and evenly. Nothing keeps a house free from aphis, thrip and other plant parasites so thoroughly and cheaply. Case of 1 doz. air-tight containers, 1 doz. sheets each, \$6.50. 1 doz. sheets, in airtight package, 60c; postpaid 65c.

Nikoteen, for Spraying

Purest and most economical. Death to aphis or green fly, thrip and many other forms of flower, fruit and vegetable lice. 30 per cent strength.

PRICES

$1\frac{3}{4}$	oz.	package\$0.40	Postpaid	\$0.45
1/2	lb.	package85	Postpaid	.90
1	lb.	package 1.50	Postpaid	1.60
4	lb.	package 5.00		
8	lb.	package10.00		

40 Per Cent. Strength,

4 lb. package..\$7.00 8 lb. package..\$13.33

Black Leaf 40

A solution of nicotine sulphate, guaranteed to contain 40 per cent. nicotine.

1	OZ.	bottle	2												\$0.25
		can													
		can													
10	1b.	can													10.75

Sulfocide

For blight on Cucumbers, Squash, Melons, Leaf Mold, Wilt, Celery, Potatoes, Tomatoes, Egg Plant, Beans, Mildew, Rust, etc., on Hollyhock, Carnation, Chrysanthemum, Roses, etc.

l quart	can	 	.75	Postpaid	.85
1 gallon	ean	 			2.00
5 gallon	keg	 			7.50

Lemon Oil

For Mealy Bug, Brown White Scale on palms and rubber plant, Thrip, Red Spider, Caterpillar, Black and Green Fly, Fleas and Skin Diseases on dogs and other animals and insects in Poultry Houses.

½ Pint\$0.25	Postpaid	\$0.30
Pint	Postpaid	.50
Quart	Postpaid	.85
Gallon		2.00

Whale Oil Soap

For destroying insects on Plants and Trees. ½ lb. boxes, each...\$0.15 Postpaid \$0.20 1 lb. boxes, each... .20 Postpaid .25

Formaldehyde

To prevent Grain Smut, Oat Anthracnose, Wheat Stinking Smut, Potato Scab, Black Leg, Lettuce Rosette and Rot, Cabbage Brown or Black Rot, Club Rot, Fusarium Wilt, Onion Smut Smudge and Rot.

		bottle	9											.\$0.30
60	lb.	keg												.12.00

Ask for booklet on the use of Formaldehyde on the farm and in the home.

Sporicide

For exterminating Smut in Grain and Scab on Potatoes.

Sporicide is the result of careful and intelligent tests for several years. It increases the yield, strengthens the stock, increases the value of the straw and does away with the poisonous dust in threshing and stock feeding.

It is simple in treatment and application and the results are positive and effectual. A pint bottle will treat 40 bushel of oats and for potatoes the same quantity is used with 30 gallon of water.

Sporicide is also used with good results on Barley and Wheat.

Price, 1 pint bottle, \$2.00

Dry Bordeaux Mixture and Paris Green Compound

To be diluted with lime dust.

1	lb.	Box\$0,25	
		Box	
35	lb.	Bucket 7.00	

Cheaper than Paris Green, it kills the bugs, and defends against flea beetles and blight.

Bordeaux Mixture Paste

Preventive of blight on potato, celery plants, etc. For fungous diseases on nursery stock, rust, moulds, leaf spot, leaf blight, mildew, black and brown rot; in fact, all fungous diseases.

1	lb.	glass	j	a	ľ											\$0.30)
5	lb.	pail														1.25	,
10	lb.	pail														2.00)
20	lb.	pail														3.50)
50	lb.	drum														8.00)

Grasselli's Arsenate of Lead Paste

Arsenate of Lead is a neutral insecticide. It destroys all leaf-eating insects, will not be washed off by rains, and will not burn the most delicate foliage.

Grasselli's Arsenate of Lead—Paste contains 15% Arsenic Oxide and 35% Lead Oxide, thus assuring consumers of a very superior grade fully equal in quality to the new insecticide law.

PRICES.

PRICES.							
1-lb.	Glass	Jars					\$0.25
5-lb.	Pail						90
10-lb.	Pail						1.70
20-lb.	Pail						3.00
50-lb.	Keg						6.00
100-lb.	Keg						11.50
300-lb.	Barre	٠. اد					31.00

GRASSELLI'S Bordeaux Lead Arsenate

A combination of Bordeaux Mixture and Arsenate of Lead in paste form and is both a fungicide and an insecticide. Especially good for Potatoes as it not only kills the bugs but also prevents Blight.

PRICES.

1-lb.	Glass	Jar	 	 	.\$.25
5-lb.	Glass	Jar	 	 	80
10-lb.					
20-lb.	Pail		 	 	. 2.75
50-lb.	Keg		 	 .	. 7.00

GRASSELLI'S

Lime Sulphur Solution

Grasselli's Lime Sulphur Solution will, if not

exposed to the air, remain in solution a long time.

Will not clog the spray pumps because it is free from sediment.

Does not have to be applied hot, because it remains in solution.

FOR FALL AND EARLY SPRING SPRAY.

To destroy San Jose Scale, peach leaf curl (apply just before buds burst), bud moth, apple aphis, blister mite, peach worm, any scale insects or bark lice, etc., mix one gallon Grasselli's Lime and Sulphur Solution with 7 to 9 gallons of water.

FOR SUMMER SPRAY.

For Apple Scab, Leaf Spot, and all Fungus diseases on apples and pears use 1½ to 1½ gallons to 50 gallons of water.

PRICES.

1-Gallon	Can	0.65
5-Gallon	Can	1.80
25-Gal. F	Half Barrel, per gallon	.21
50-Gal. I	Barrels, per gallon	.18

Commercial Flour Sulphur

FOR USE IN MAKING LIME SULPHUR SOLUTION AND FOR DUSTING.

PRICES

5	lbs.		8	0.25	Postpaid	\$0.35
10	lbs.			.40	Postpaid	.60
25	Ibs.			1.00	Postpaid	1.30
50	lbs.					1.75
100	lbs.					3.00
500	lbs.					13.00
	1000	nounds	and	up. 2	%c per li).

SCALECIDE

The Standard Soluble or Miscible Oil Spray for San Jose Scale and All Soft-Bodied Sucking Insects.

"SCALECIDE" should be applied in the Fall of the year just after the leaves drop, any pleasant day during the Winter when water will not freeze, or just before the leaves and buds begin to open in the Spring.

PRICES.

1	qt	\$0.40	Postpaid 8	.50
	gal. can			
	gal. jacketed can			
10	gal. jacketed can			6.50
30	gal. barrel			15.00
50	gal. bbls., 50c per gal.			25.00

"ELECTRO" Arsenate of Lead

(In Dry Powdered Form)

The only successful dry arsenate of lead because it is the only one in amorphous (non-crystalline) form. Electro Arsenate of Lead is in a form that will stick the longest. This is not true where the product is granular or crystalline. This is one reason why Electro Arsenate of Lead should always be used. Heavy rains will not readily wash it off and it will be effective for months after application. It mixes instantly with water.

Electro Dry Powdered Arsenate of Lead is the strongest as well as the safest to use. By our special process, which no other manufacturer can employ, we can combine properly with the lead, 32½ per cent. to 33 per cent. arsenic oxide (the active agent) and yet have less than ½ of 1 per cent. free arsenic oxide. (Free arsenic oxide will injure the foliage if in excess.) This gives a killing strength over 100 per cent. greater than that of other brands and, consequently, much less Electro Arsenate of Lead Powdered is needed to do the work.

PRICES.

1/2	lb.	Carton\$0.2	5	Postpaid.	.\$0.30
1	lb.	Carton4	0	Postpaid	.45
6	lb.	Kit 2.0	0	Postpaid	2.15
$12\frac{1}{2}$	lb.	Kit 3.6	0	Postpaid	3.80
25	lb.	Drum 6.7	5	Postpaid	7.15
59	lb.	Drum			12.75
199	lb.	Drum			23.50
300	1b.	Barrel			67.00

Bowker's Pyrox



The One Best Spray. "Fills the Barrel with the Apples they used

to put on top."

The best and safest all around spray for killing all forms of leaf-eating insects including the codling moth and the potato bug, and preventing attacks of fungous troubles and blight. It

does not injure fruit or foliage and is equally good on apple trees, potatoes, garden vegetables and shrubbery. It "sticks like paint, and rain won't wash it off."

Several carloads of Pyrox were used in Pennsylvania last year without a single complaint.

All of the silver cups awarded at the Meeting of the Fruit Growers' Association at Harrisburg went to fruit which had been sprayed with Pyrox,

1	lb.	Jar\$0.30
5	lb.	Jar 1.00
10	lb.	Jar 1.85
25	1b.	Jar 4.50
50	lb.	Drum 8.00
100	lb.	Keg15.00
300	lb.	Barrel43.50

Modoc Spra-Sulphur

Soluble Sulphur Compound

Modoe Spra-Sulphur Compound is a dry, soluble sulphur compound, in powder form, that dissolves instantly in warm or cold water. It contains over 95 per cent of active sulphur ingredients, the highest percentage of all sprays on the market. Made by a perfected process under the Hite patents. It is put up in air-tight, friction-top cans, and will keep indefinitely. Fruit-growers who have used Modoe Spra-Sulphur claim that it is equal in efficiency, if not superior to lime-sulphur solution. It leaves no sediment, does not clog the nozzle, sticks like paint, and penetrates deeply. For winter spraying, when trees are dormant, use ten pounds Modoe Spra-Sulphur to each fifty gallons of water. For summer spraying, when trees are in leaf, use one to one and one-half pounds of Modoe Spra-Sulphur to fifty gallons of water. Special directions with every package.

1 lb. can\$0.25, postpaid \$0.35	25 lb. can\$2.50, postpaid \$2.85
5 lb. can 1.00, postpaid 1.15	50 lb. can 3.75
10 lb. can 1.50, postpaid 1.70	100 lb, drum 6.50

Aphine

Is the recognized standard insecticide for plant lice of all descriptions. It is universally used by commercial growers and private gardeners against green, black and white fly, thrips, red spider, mealy bug, soft scale and all sap sucking and soft bodied insects. It is applied as a spray, dip or wash, by mixing with water. Equally effective for house and garden plants (flowers, fruits and vegetables).

Prices:

Gill\$	0.25, p	ostpaid	\$0.30	•	Quart\$1.00, postpaid \$1.10
Half pint	.40, p	ostpaid	.45		Gallon 2.50
Pint	.65, p	ostpaid	.75		Half barrel (25 gals.)43.75

Fungine

Fungine is a sulphur composition in solution and is an infallible remedy for mildew, rust, wilt, bench rot and other blights which effect flowers, fruits and vegetables. It is equally effective under glass and out of doors. It dilutes readily with water; contains no sediment; and, unlike Bordeaux and lime and sulphur, does not stain but cleanses the foliage. One gallon makes fifty gallons spraying material.

Prices:

Half pint\$0.30,]	postpaid \$0.35	Gallon\$2.00
Pint50,]	postpaid .60	Ten gallon keg15.00
Quart75, 1	postpaid .85	Half barrel (25 gals.)31.25

Vermine

Vermine is a vermicide and soil sterilizer which will destroy cut, eel, wire and grub worms, slugs, root lice and ants. Used in the greenhouse, garden and field. Apply one gallon Vermine to four hundred gallons water by thoroughly soaking the ground. It will do its work effectively without injury to vegetation and protects your crops and lawns against ravages under the soil.

Prices:

Gill\$0.25, postpaid \$	0.30	Gallon\$3.00
Pint65, postpaid	.70	Five gallon keg12.50
Quart 1.00, postpaid	1.10	Half barrel (25 gals.)56.25

Borowax

• Affords absolute protection against borers, when applied to peach, plum, apple, pear and quince trees.

Quart	. \$0.35	Postpaid	\$0.45
½ gallon	60	Postpaid	.70
1 gallon			. 1.00
6 gallons			
½ barrel (26 gals			
Barrel (52 gals.)			35.00

TREE WOUND PAINT

Should follow all pruning operations.

All pruned areas need attention. Neglect means decay!

"ELECTRO" TREE WOUND PAINT is the one ideal material, embodying all the qualities required in tree surgery operations—antiseptic and penetrating, forming a lasting, water-proof coating which does not injure or interfere with the growth or healing of the wound.

Ŭ 1	at	\$0.50 Postpaid	1 \$0.60
10	gal		. 10.00

Hammond's Weed Killer

Hammond's Weed Killer has been in use for many years to prevent the growth of weeds along gutters, paths or tennis-courts, also to prevent the growth of wild ivy. Wild ivy in some parts is very annoying, and a dilution of one part of Weed Killer to thirty parts of water, poured from a watering-pot around the roots, will destroy them. Any place that it is desired to keep clean and free from any growth can be kept tidy for a whole season by one application of this preparation. The weaker the dilution on strong, heavy weeds the quicker it acts, and the effect will last a long time. This Weed Killer will, naturally, kill any kind of grass without distinction, so it must be used cautiously where the grass is desired.

Qt.			 	\$0.3	35	Post	paid	\$0.45
$\frac{1}{2}$	gal.		 		55	Post	paid	.85
1	gal.		 				, .	1.15
5	gals.		 					5.00
10	gal.	kit	 					9.50



Sticky Tree Cord

A soft cord, about \% of an inch in diameter, thoroughly saturated and coated with a black, sticky material similar in character to that used on sticky fly-paper. It is supplied in tubes about 2\% x 6 inches, and the cord is pulled out through a hole in the screw-top, which has an attachment for clamping to facilitate cutting off the cord. It is applied to trees by tacking one end to the tree, then passing it around once or twice, tacking about every 18 inches and then cut off.



Each tube contains about 30 feet or cord, sufficient to band about ten trees one foot in diameter once around, or ten trees 6 inches in diameter twice around.

Trees banded with Sticky Tree Cord are not unsightly.

A small clamp to catch hold of the cord is supplied free. 25c; postpaid 32c.

75 1.6

Tree Tanglefoot

TREE TANGLEFOOT is a sticky preparation similar to substance used on fly paper. It is applied directly to tree trunks with a wooden paddle. One application remains effective three to four months (rain or shine), fully exposed to weather. Unquestionably the most simple, effective and economical means of protecting trees against gypsy, browntail or tussock moth, caterpillars, canker worms, climbing cut worms, ants or any other climbing pests. One pound makes 8 to 9 lineal feet of band. Will not injure trees. No mixing, always ready for use. Guaranteed to keep perfectly many years in original packages.

Prices:

1 lb. ean......\$0.35; postpaid \$0.40
3 lb. ean......\$1.00; postpaid \$1.10

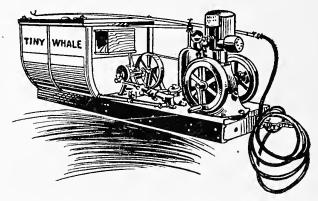
10 lb. ean......\$3.00; postpaid \$3.20
20 lb. ean......\$5.50; postpaid 5.75

GRAFTING WAX

1/2 lb. package...\$0.15 Postpaid \$0.20 1 lb. package...\$0.25 Postpaid \$0.30

The "Tiny Whale" Power Sprayer

ONE MAN OUTFIT



The Power Sprayer that we show here is a model that is made especially for hilly country. This machine combines simplicity with strength and lightness, without a weak spot in any part. While intended for a one-man outfit it is arranged with a "Y" so that two leads of hose may be used.

Note the peculiar construction of pump—no gears or complicated parts to give trouble. The agitator is of the rotary type and is attached to same shaft that drives pump; connection is made to agitator by means of bevel gear. There are but two valves in this pump; valves are bronze balls resting on bronze seats. There are no leathers in this pump and the piston, which is the only part coming in contact with fluid, is made of Monel metal and will not corrode. The extension rod is bamboo, lined with seamless brass tubing. Brass center tube is attached to bamboo by aluminum clamp ends and will withstand 350 lbs. pressure. Engine is 1½ H. P. guaranteed frost proof.

THE TANK is made of Selected Cypress. Built strong so operator can work from top.

THE FRAME is three inch channel irons with cast iron cross pieces to which plank bed for engine and pump is attached.

The capacity of the tank is 100 gallons and capacity of pump is about 4 gallons per minute. We can furnish a 150 or 200 gallon tank at an additional charge if wanted.

The price on this splendid outfit will enable the small fruit grower to use this and find it profitable as well as the large fruit grower, for this machine will do the work equally as well as the larger high-priced outfits.

Write for Special Circular. PRICE \$135.00

"THE BRONCHO"

Double Acting Power Sprayer Ratchet Movement

The Broncho Double Acting Spray Pump is a perfect outfit and will satisfy the most exacting fruit grower. Mounted on heavy skids, compact and powerful, built low down, makes it the IDEAL outfit for hilly country.

Pump has automatic agitator with brush on same that passes over intake brass strainer with every stroke.

Cylinder—Brass Lined.

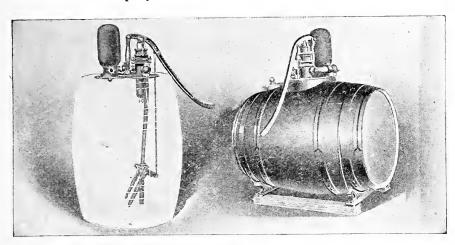
Valves—Bronze Balls resting on bronze seats. Caps covering valves are not threaded but are held in place by heavy cast yokes. To get at valves it is only necessary to remove ¾ inch nut.

Discharge is fitted with "Y" so two leads of hose may be used, if occasion requires.

Outfit as shown has twenty-five feet lead of high grade two-braid spray hose and ten feet Bamboo pole and two nozzles.

AUTO-SPRAY No. 24

Barrel Sprayer for Orchard and Field Crops



The Auto-Spray No. 24 is especially adapted for handling heavy solution, such as Bordeaux mixture, Lime Sulphur and Whitewash.

All valves and working parts are of brass, and are exposed where they may be reached without removing or disarranging the pump. The outfit is not top heavy. The pump is constantly primed. Easy to operate and will develop high pressure using one or two leads.

IN DETAIL

Pump casting, base and air chamber are one piece and have never been known to require renewing.

Pump—Plunger style. Brass plunger. 2 inches diameter. The handle permits 4-inch stroke.

Packing—Graphite composition. Packed from the outside. Adjustable without withdrawing the plunger and by simply screwing two nuts over the gland.

Valves—Brass. Standard angle check type which give broad bearing surface.

Agitator—Twin paddle—keeps the solution thoroughly stirred at the suction opening.

Suction Pipe—Galvanized iron.

Drip Cock at foot of pump cylinder allows draining and prevents freezing.

Unless otherwise ordered, we furnish the pump for mount-on top of the barrel. When we mount the pump we use a new barrel, and when mounted on the side include skids without extra charge.

We furnish directions when a customer mounts his own pump, and when ordered to be mounted on the side, include base to rest the pump on barrel.

PRICES

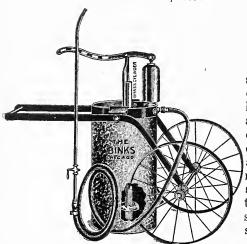
2 101 0 100	
Auto Spray No. 24, pump only	\$13.00
Mounted on barrel, either top or side, extra	3.00
Twenty foot, 3-ply, half-inch discharge hose, 15 cents per foot	3.00
Bamboo brass lined extension, stop-cock and dripshield, length, 9 feet	3.15
Non-Clog Atomic nozzle. Has a capacity of four Vermorels	1.00
Four row potato attachment complete with nozzles, can be attached to rear of	
any farm cart	9.00

"Eureka" Spray Outfit

This outfit is complete and ready for operation. Holds fifty-two gallons. Is mounted on two 38-inch concave tire wheels with 2-inch face, balanced with sufficient weight on the handles to hold it steady on rough surfaces. Is fitted with our No. 5 pump. The pump is held in place by two strong castings and may be adjusted up or down to suit the height of the operator. A mechanical agitator keeps the liquid well mixed. All valves and working parts are brass and the outfit has the following equipment: Air compressor tank which will continue spraying for 10 to 15 minutes after pumping has stopped, Pressure Gauge, 10 feet 5 ply Pressure Hose, 10 feet Pipe Extension (in three pieces), 1 T Handle Shut-off Cock, 1 Single "Ideal" Nozzle.

EUREGA VI.2 I.

PRICE \$28.00



No. 21 Binks Sprayer

Our No. 21 machine is the latest general purpose spraying machine on the market today. The machine is strongly made of the best possible materials, light consistent with strength, and owing to its portability will suggest itself for many uses. The machine is specially adapted for use of the poultrymen, dairymen, etc. The machine being but 15 in. wide at the widest point allows same to pass through narrow passage ways. Tank is made of galvanized steel, holds 12 gallons of liquid. Mechanical agitator operates at each stroke of the pump and at the same time prevents sediment from clogging the strainer.

Equipment—Machine complete, as illustrated, with 10 ft. Star Special ½ in. discharge hose and couplings, spray pipe complete with ¼ in. cock, one star nozzle. Wheels furnished with this sprayer are 16 in. in diameter, made of No. 9 wire, of the half-oval type and will withstand much hard usage.

PRICE, \$14.00

Auto-Spray No. 1

The Auto-Spray No. 1 is the best compressed air sprayer made. Built strong, guaranteed against defect, and to be satisfactory. Will handle all solutions satisfactorily.

The pump is locked air tight to the tank by a simple sliding cam. There is no screw connection to wear out or become leaky. Every part is immediately accessible and easily replaced.

Each machine fitted with 2 feet of ½-inch hose, fine spray nozzle, solid stream cap and either stop cock or our popular automatic shut off, as ordered. The automatic shut off draws a self-cleaning wire through the nozzle at each operation.

	Postpaid
Auto-Spray No. 1-A, brass tank with stop cock\$8.00	\$8.25
Auto-Spray No. 1-B, brass tank with auto-pop 8.50	8.75
Auto-Spray No. 1-C, galv. tank with stop cock 5.00	5.25
Auto-Spray No. 1-D, galv. tank with auto-pop 5.50	5.75
Brass extension, 2 feet	.70
Brass strainer	1.05



The "Kant-Klog" Sprayer STYLE G

The Sprayer body is made of heavy polished brass or galvanized steel, as desired.

The air pump is made of heavy brass two inches in diameter. Hose couplings are solid brass, standard cut threads, ends heavily ribbed to prevent hose slipping off. Hose is high grade, three-ply, supported by a coiled spring, bell-shaped at outer end to prevent breaking. A safety valve is provided to allow air to escape after the necessary pressure has been obtained.

The "Kant-Klog" Nozzle furnished with this machine without extra charge, makes two bell sprays of different size, volume and fineness; one flat spray and two sizes of straight streams. Sprayer holds between four and five gallons, and can be carried by carrier strap or air pump handle.

A few seconds' working of the air pump thoroughly agitates the solu-

tion and charges the sprayer with compressed air.

After sprayer is charged you need not stop for anything; just walk along from one row to another, the machine will supply sufficient spray to enable you to do the work as fast as you can walk.

Price, with galvanized Steel body\$5.00	Postpaid	\$5.25
Price, with polished Brass body	Postpaid	7.50
Kant-Klog Nozzle separate	Postpaid	1.85
Three-foot Brass Extension, each	Postpaid	.55

Binks No. 22 Universal Sprayer



We guarantee this sprayer to be made of heavier metal, better material and to operate at a higher pressure than any similar type made. It consists of a well made brass or galvanized steel tank, 20 inches high, 7 inches diameter, having a capacity of 4 gallons, and a strong self-contained all brass air pump. After the machine is filled within 3 or 4 inches from the top with spraying fluid, simply pump 30 or 40 long strokes with pump and you are ready for spraying. Two such pumpings will empty the entire tank at high pressure.

This machine as well as other machines of our manufacture is guaranteed to spray any insecticide, disinfectant, whitewash or paint that can be sprayed.

Equipment—Furnished complete with 3 feet discharge hose spray nozzle and shutoff cock, with shoulder strap for carrying.

Galvanized\$6.00 Postpaid \$6.20 Brass 9.00 Postpaid 9.20

The "Perfection" Sprayer

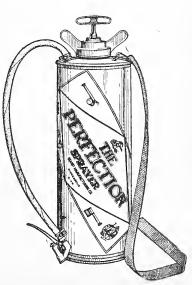
This is a Sprayer of the high pressure type. It is larger, stronger and much more powerful than anything in its class, and is as near fool proof as it can be made. The barrel is 7½ inches in diameter, 20 inches high. The pump is 13/4 inches seamless brass tubing. The valves are METAL. The top is fastened after the style of the best makes of fire extinguishers. The hose is 5-ply cloth inserted. The nozzle is our well known Automatic type. Capacity of Sprayer, 3¾ gallons. Weight, 9½ lbs. All Sprayers tested to 60 lbs. before leaving factory. Built of galvanized steel, or all brass, as ordered.

This Sprayer will handle whitewash, water, paints, Bordeaux mixtures, etc., perfectly. Turn disc in nozzle with letters W. W. outward to use Bordeaux and Whitewash and thick

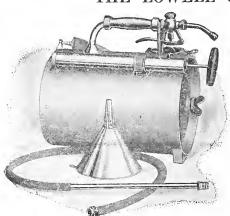
mixtures. Turn inward for fine spray.

PRICES

1 101 01 N.	
Galvanized Steel\$5.00	Postpaid \$5.25
All Brass 7.00	Postpaid 7.20
Perfection Nozzle which fits most	any compressed
air sprayer 1.00	



THE LOWELL COMPRESSED AIR SPRAYER



No complicated parts to get out of order.

One charge sufficient to expel entire contents of tank. New Automatic Thumb Lever Valve shuts off instantly.

No packing or springs to wear out in the valve. All working parts made of hard brass casting.

Tree Attachment and funnel with brass wire strainer

for filling with each machine.

Will stand five times the air pressure necessary to operate.

Capacity of tank, 3 gallons. Handy to carry as a grip,

Made of galvanized Steel and Brass.

Shoulder Strap adjustable to accommodate the operator, furnished with each machine.

Galvanized\$5.25 Postpaid \$5.45 Brass 7.25 Postpaid

The Standard Spray Pump A set of graduating disks are runnished with the No. 3 nozzle that gives

The Standard Spray Pump is in reality simply a very carefully designed and accurately made "Squirt-Gun," provided with a proper outfit of nozzles.

Its plan of operation is slightly different from other types of spraying apparatus since the hose is used on the suction end instead of the discharge end. This makes it possible to use the pump with a bucket, barrel, tank or knapsack, depending upon the number of trees or the kind of spraying to be done.

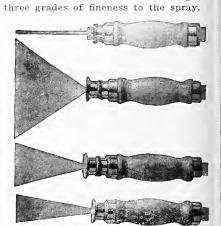
For bucket use, a 3½-foot length of hose is supplied. To use it with barrel or tank for a large orchard, a longer hose up to 25 or 30 feet is desirable.

For spraying young or scattered trees or truck crops such as potatoes, tobacco, etc., the knapsack and short extension are used. With these attachments, the Standard will spray potatoes one row at a time at the rate of an acre an hour or better.

> Standard Pump with "Potato" Extension . and No. 3 Nozzle Attached to Knapsack



The Standard with Knapsack as a Potato Sprayer



What the Standard Will Do.

Spray orchards large or small.
Spray vineyards and bushes.
Spray potatoes and all truck crops.
Spray whitewash.
Spray cattle dip and disinfectants.
Spray the tallest fruit tree FROM

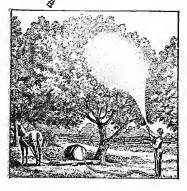
THE GROUND.

Saves OVER HALF THE TIME and does its work thoroughly.

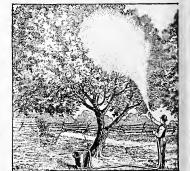
The Standard is made entirely of brass. No leather packings. No iron casting to rust or decay. Nothing to get out of order.

PRICE LIST

.\$4.00



The Standard as a Barrel Pump with Long Hose



Using the Standard with Bucket and Short Hose

Auto-Spray No. 5



This pump is the ideal all-purpose hand sprayer. Its field is practically unlimited as it may be used for spraying trees, vines, garden truck, potatoes and any field crops, and for handling whitewash and disinfectants.

It is made entirely of brass, doing away with all danger of corrosion.

The pump is double acting. This feature makes the spray continuous.

In an actual test this pump generated a pressure of 180 lbs. per square inch, with ordinary effort.

The pump itself is so constructed that it can be taken apart instantly.

We furnish with this pump 3½ feet of %-inch suction hose and a heavy strainer that keeps the hose from working out of a bucket or tank.

PRICES.

Price.	Postpaia.
Auto-Spray No. 5, pump, hose, nozzle and strainer complete\$4.50	\$4.65
Extension	.55
Galvanized iron reservoir (for use on potatoes or field crops) 3.00	

Little Giant Sprayer

This spray pump is constructed entirely of brass. It is so arranged that the labor of pumping is all done on the downward stroke of the piston and nothing on the up. The effect of this operation while pumping is to hold the pump down. The foot rest steadies the pump, holding it in proper position.

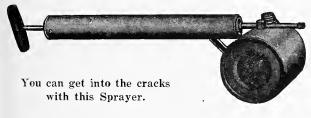
It is provided with a large air chamber, and has brass ball valves and detachable hose; the nozzle throws a continuous spray, and is not affected by the movement of the plunger. Will carry a pressure on the nozzle of from 50 to 100 pounds with very ordinary exertion. For spraying it is arranged to discharge a fine jet in the bottom of the bucket to keep the solution thoroughly mixed and agitated, a feature peculiar to this pump only, and a very necessary feature to spray pump.

Little Giant Brass Spray Pump, with agitator, complete with hose and Imperial combination fine, coarse spray and solid stream nozzle, with malleable foot rest.

Price, \$3.00; postpaid, \$3.15.

PALLANT TA

Lowell Continuous Sprayer



The Lowell Continuous Sprayer as the name implies is so constructed that it not only sprays on the downward stroke of the plunger but also when it is drawn back, thus causing a continuous mist-like spray.

Capacity, One Quart.

PRICES.

Tin	 80.60	Postpaid	\$0.70
Brass	 1.25	Postpaid	1.40

moved without

taking out screws

Angle Spray

Cap

Auto-Spray No. 37

CONTINUOUS SPRAYER WILL HANDLE ALL SOLUTIONS

The entire front is removable by unscrewing the front cap, permitting the syphon tube to be withdrawn should it become clogged.

Fitted with two spray caps, one straight, the

other at an angle for reaching the under side of broad leaves. Will spray with tank at any angle. Solution does not come in contact with pump cylinder.

PRICES.

Syphon Tube

Removable

Straight

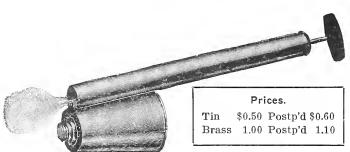
Filler

Opening

Stray Cat

Auto-Spray No. 37-B, galv. reservoir, One Quart	\$0.90	Postpaid	\$1.00
Auto-Spray No. 37-C, brass reservoir, One Quart	1.25	Postpaid	1.40
Auto-Spray No. 37-D galy reservoir Two Quart	1.20	Postpaid	1.40

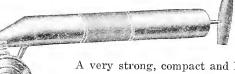
LOWELL GRAND SPRAYER



It has an Air Chamber in the end of the pump tube that prevents any moisture being drawn back on the valves. The tube is twenty inches long, and the tapering form of the tank allows the use of two short straight brass solution tubes, which helps to make the sprayer easy to operate.

No Corks to Lose Out-They have a screw cap where tank is filled. Only high-grade material used in construction.

Strong, Durable and Satisfactory. Will spray up as well as down.



Pittsburgh Tin Sprayer

A very strong, compact and handy sprayer.

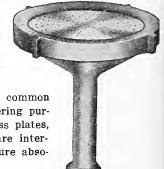
Made of good heavy quality bright tin plate and each Sprayer tested very carefully for leaks and spray.

Gives a fine, dense spray and may be used for exterminating potato bugs or any other insect pests in house, barn, garden, green-house, orchard, farm and poultry yard.

Capacity 1 quart.

Price 50c. Postpaid 60c.

CHICAGO SPRAYER



The Chicago Sprayer is designed to take the place of the common copper sprinkler for attaching to the end of the hose for watering purposes. The nozzle is all aluminum and equipped with two brass plates, one fine and one coarse. Due to the fact that these plates are interchangeable and can be removed for cleaning is a special feature absolutely found in no other nozzle.

Price, \$2.25. Postpaid, \$2.35.

Carbondale Hydrometer

For Testing Lime Sulphur

We draw special attention to the following advantages of our Lime-Sulphur Hydrometers over the ordinary cheap hydrometers, viz.:

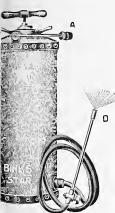
- 1. It is compact and small enough to be easily handled and used in an ordinary bucket if necessary.
- 2. It is proportioned so as to give a stem %-inch in diameter, ample in strength if used with reasonable care.
- 3. The scale is hand written, each instrument being individually calibrated and hence accurate; the cheaper forms have printed scales and are far from being accurate.
- 4. The red line with arrow point at 1.030 indicates the proper strength of the solution for dormant spraying and is easily noted, the lettering being clear and legible, complete with 7 inch glass test jar.

Price, \$1.00. Postpaid \$1.10.



WHITE WASHING MACHINES

LITTLE WONDER—Style H



A White Washing Machine is one of the best investments for a farmer or poultryman. The various classes of work to which the machine can be applied are almost unlimited, and it will prove astonishing the amount of work which can be performed in a day by ordinary unskilled labor, while the expense of brushes, pails, ladders and other tools of the painter's kit are entirely dispensed with.

Our "Little Wonder" Machine is made of heavy Galvanized Iron with all joints well riveted and soldered, and a powerful self-contained all brass Air Pump is furnished. They will be found invaluable for small classes of work, as around Residences, Barns, Dairies, Poultry Yards, Green Houses, Gardens, etc., and will suggest themselves for a variety of uses other than that for which they are sold. They are provided with a bail handle and are very portable. Capacity of Tank, 3 gallons of Liquid.

We furnish 10 feet of % inch Discharge Hose, Spray Cock and Spray Nozzle with each machine.

Price, \$9.00. Postpaid, \$9.30.

STAR, STYLE J

This is a very valuable machine, being strong and well built, the working parts of same are made of brass and will not corrode from the use of any liquids.

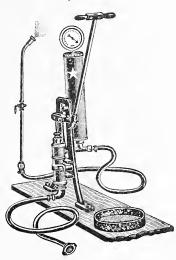
One man can operate this machine alone and from 70 to 80 lbs. pressure can easily be carried.

Machine complete as shown by the above illustration (without pail for holding liquid,

anything can be used for this purpose) with spray pipe, spray nozzle and cock, ten (10) feet of our Star Special % in. Discharge Hose.

Price, \$10.00. Postpaid \$10.35.

STAR, STYLE D



In general use by some of the largest industries of the country. Recommended for those having a considerable amount of work to do.

Capacity equal to work of 10 men with brushes.

EQUIPMENT.

Spray pipe complete with ¼-inch cock and spray nozzle, one extra spray tip, 200 pound pressure gauge, special galvanized sieve, follower wrench, one length of 1-inch suction hose, and 10 feet of ½-inch Star special discharge hose.

PRICE, \$20.00.

THE LIGHTNING WHITEWASH SPRAYER AND FORCE PUMP



AUTO-POP No. 460



Automatic and entirely of brass. By a pressure of the fingers on the handle, the spray is turned on; by releasing the pressure the spray automatically shuts off; unlike most shut-offs, it only takes one hand to manipulate it. The Stop-Cock requires one hand to hold the nozzle and the other hand to operate the shut-off lever. Price, \$1.25; postpaid, \$1.35. Complete with hose and fittings, \$1.75; postpaid, \$1.85.

EXTENSION PIPE No. 318

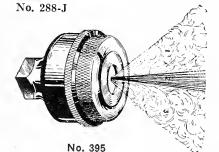


Brass. Two-foot lengths. For tree work two or three lengths are commonly used. The extensions screw into one another and connect direct to the shut-off. The nozzle goes on the far end of the extension.

Price, each, 60c; postpaid, 70c.

No. 288 J-Brass elbow, 90°, ¼ in. pipe thread both ends. Price, 20c; postpaid, 25c

No. 395 Non-Clog Atomic Nozzle



It is fitted with standard ¼ in. pipe thread and will fit all conections of standard make. It cannot clog, fitted with a removable wire screen. By a simple adjustment the nozzle may be altered to give every graduation of spray.

Prices

Brass\$1.00 Postpaid \$1.05

No. 398 45 degree angle non-clog nozzle, made the same as

No. 395 except the 45 degree angle.

Prices

Brass\$1.00 Postpaid \$1.05

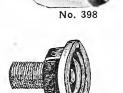
No. 288-D Brass hose coupling, male, long

tail piece, for $\frac{1}{2}$ in. hose.

Price 20c Postpaid 25c



No. 288D



No. 265

No. 288E

No. 288-E Brass hose coupling, female, long tail piece, for $\frac{1}{2}$ in. hose

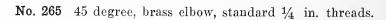
Price 20c Postpaid 25c

No. 366 Brass Strainer for auto spray, No. 1

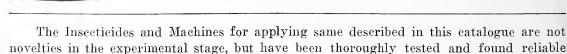
Price \$1.00 Postpaid \$1.10



No. 366



Price 20c Postpaid 25c



for the uses for which they are intended.

Customers using large quantities of Insecticides are requested to write to us for special prices specifying the quantities wanted.

The Acre-An-Hour Sifter

FOR FARM USE

This SIFTER is for applying any quantity or variety of dry insecticide for Potatoes, Melons, Cucumbers, Cabbage, Cauliflower, etc. Land Plaster or Lime mixed with Paris Green or Arsenate of Lead, or any of the numerous manufactured varieties. It is conceded by all who have knowledge of the SIFTER, to be the fastest, easiest, cheapest, and ONLY implement made that will cover large vines, using any dry mixtures, AS FAST AS A MAN CAN WALK.

Price 75c. Postpaid 85c.





Dickey Duster

For use in applying DRY insecticides to small flower or vegetable gardens.

Price 25c. Postpaid 30c.

Woodason's Powder and Liquid Spraying Apparatus

For the Destruction of Insects, Rust, Smut, Mildew, Blight, Rot, etc., in Houses, Gardens, Orchards or Field.



SINGLE CONE INSECT POWDER BELLOWS

It will last a lifetime. It never fails to completely destroy Bed Bugs, Roaches, Moths, Mosquitoes, Flies, Fleas on Dogs, Lice on Birds, Animals, Plants, etc.

Being strong, it blows the Powder well behind the woodwork and into the cracks where the insect breeds in Houses, Hotels, Camps, Henneries, Greenhouses, Hospitals, Schools, Jails, Police Stations, Asylums, Poor Houses, etc.

Single Cone Powder Bellows, small size \$1.75; large size \$2.50 Liquid Spraying Bellows, small size 2.00; large size 2.50

THE BROWNIE DUSTER

For Garden Insects



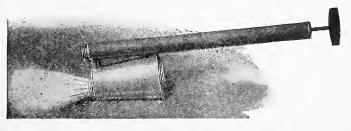
For in-door as well as out-door work. Powders used dry are more effective than otherwise, and should be distributed in a smoke-like dust so as to be hardly perceptible on the leaves.

Two 16 in. tubes and one spread nozzle furnished with each Duster. Machine weighs complete $3\frac{1}{2}$ pounds. Reservoir holds $\frac{1}{2}$ lb. Paris Green, 2 oz. Powdered Hellebore, or 2 oz. Insect Powder.

Price, \$3.50; postpaid \$3.65.

Lowell Powder Duster

It is unnecessary to give the details of the Mechanical construction of the Duster, as we give a positive guarantee with each duster, that it is impossible to draw powder back into the cylinder pump, and if the powder is sifted through a screen and kept absolutely dry it will be impossible for the same to clog. With these features covered the Duster is sure to give satisfaction. The powder can holds one quart.



Price 60c. Postpaid 70c.

PRUNING SHEARS



Nos. 50 and R55

California Pattern, with adjusting nut and regulating ratchet; polished tool steel blades, tempered; volute spring.

50, 9-inch, per pair. \$0.60 Postpaid \$0.70 No. R55, 9-inch, full polished,

per pair 1.15 Postpaid 1.25

California Pattern, with adjusting nut and regulating ratchet; polished tool steel blades of extra quality, tempered; longitudinal double brass spring.

No. R60, 9-inch, per pair\$1.00 Postpaid \$1.10 No. R65, 9-inch, full polished, per pair 1.35 Postpaid 1.45



Nos. R60 and R65



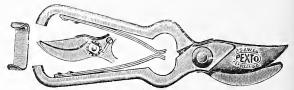
Nos. R70 and R170

With adjusting nut and regulating ratchet; straw-colored tool steel blades of extra quality, tempered; volute spring.

No. R 70, 9-inch, per pair........\$1.50 Postpaid \$1.60 No. R170, 9-inch, full polished and

nickel plated, per pair...... 1.75 Postpaid 1.85

Swiss Pattern. Full polished, best crucible steel quality blades, tempered, ground convex; adjusting nut and regulating ratchet; longitudinal double brass spring; removable handle-clip.



No. R85

Each shear individually boxed, with an extra blade, which practically doubles the life of the shear.

No. R85, 9-inch, per pair......\$2.00 Postpaid \$2.10

Orchard King Pruning Shear

This two-hand pruner shear readily cuts a live tree branch two inches thick.

A roller bearing makes it work easily and prevents wear.

Notice the compound leverage, and notice, too, the slot in the blade at the pivot bolt. These exclusive features cause a powerful, extra long drawing cut, so that the limbs are not bruised or crushed, but are sl clean, hence the wounds heal quickly sheared without decay.

Notice, too, how compact the knife is. Thus it can be worked where limbs are very close together, removing one without injury to the others.

PRICE

Orchard King Pruning Shear.....\$4.50 Postpaid \$4.70



PRUNING KNIVES

Happy Thought and Detroit

Both these knives have a pump gun action, which is very effective for setting back, budding, shaping and trimming. For light or medium work, they are favorites, because they permit the operator to stand on the ground. The Happy Thought knife, the one with the straddle fork end, will cut limbs up to three-quarters of an inch in diameter; the Detroit, with the hooked end, up to one inch.

Both knives work easily, because they have the same powerful leverage and long drawing cut which are features of all our pruning knives.

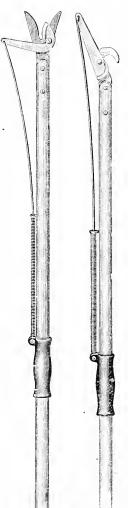
The material is likewise of best quality. The blades are of high carbon

crucible steel, tempered in lead and drawn in oil—the most approved and most modern method. The handles are of prime selected, hard maple stock.

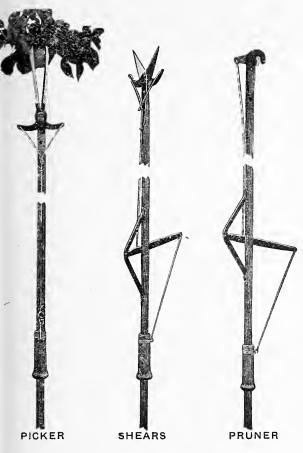
These knives are made in two lengths-eight and ten foot. Longer handles will be supplied at an additional price.

Нарру Detroit Thought

HAPPY THOUGHT AND DEROIT PRUNING KNIVES 8 foot......\$2.00 40 foot......\$2.25



BASTIAN PRUNERS AND PICKERS



The Bastian "Oregon" Pruning Shears

These shears work with the same easy but powerful compound action as the pruning hook. They are especially adapted for cutting out water sprouts and suckers, heading back young trees, trimming hedges, berry bushes, etc.

The Bastian "Oregon" Pruner

Operates with a single pump-gun action upon a most powerful compound leverage, enabling you to cut with a quick pull a small twig or a limb an inch thick. This pruning hook is light, but very strong, powerful and durable. The natural position of your hands on the pole-handle gives ease, speed and accuracy of operation. All side-strain is eliminated as the compound leverage principle places the strain lengthwise of the pole. The perfectly tempered and ground Sheffield Tool Steel blade makes a clean, smooth cut—there's no chance for it to pinch or bind.

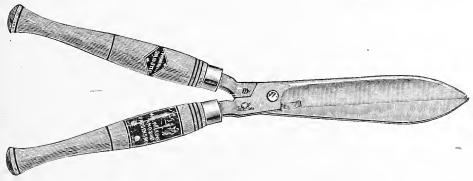
The Bastian "Oregon" Fruit Picker

gets the fruit that's "way out of reach" of your hand and picks it without bruising in the slightest. You need this handy fruit picker. It will soon save enough fruit to pay a big profit.

PRICES

Shears 6 ft. \$2.25 Pruners 6 ft. \$1.50 Pickers 6 ft. \$1.50	8 ft. \$2.50 8 ft. \$1.75 8 ft. \$1.75	10 ft. \$2.50 10 ft. \$2.00 10 ft. \$2.00	12 ft. \$2.75 12 ft. \$2.25 12 ft. \$2.25	14 ft. \$2.50	16 ft. \$2.75
1 ICKCID 0 10. 01.00	Ο 10. φ1.10	10 10. \$\pi_{\infty}\$	12 10 φ2.20		
Extra Blades for Shears	or Pruners, 15	c each.			

HEDGE AND GRASS SHEARS



4	Postpaid
No. 101. Hedge Shears, Genuine Cast Steel, Polished, Notched, Polished Steel Ferrules,	
The Blade is notched near nut to hold and cut large branches. Made in two sizes:	
9 inch\$2.25	\$2.40
10 inch	2.65
No. 161. 5½ inch Cut. Grass Shear Hardened and Tempered	.45
No. 2263. 5½ inch Cut. Grass Shear Tempered Steel Half Polished Blade. Tempered	
steel bows, polished shank, bent pattern	.65
No. 367. 5½ inch Cut. Grass Shear Hardened and Tempered	
No. 2000. 6 and 6½ inch Cut. Grass Shear, All Steel Blade, Trowel Shank. Gets close	
to the work without injury to the hands. 6 irch 60c, postpaid 65c. 6½ inch90	1.00
v v	

Searight Pruning Tools

No. 1. EXTENSION TREE TRIMMER

Has a compound lever head and is made with a hook and side lever. It is calculated for heavy work and will cut a limb up to 1½ inches in diameter. Instead of running the rod connecting the knife lever along one side the pole to a handle lever, we have placed the handle lever on the opposite side, which allows the rod to cross the pole. As a result one-half the strain is thrown on one side of the pole and one-half on the other, which gives about double strength, and instead of the pole warping and bending, it has a tendency to remain straight and stiff.

The strength, durability and easy cutting qualities of these trimmers will appeal to both the merchant who handles them, and the

man who may have the pleasure to use them.



Prices.

With	8-foot	solid pole\$2.35	
With	8-foot	jointed pole 2.65	
With	10-foot	solid pole 2.45	
With	12-foot	solid pole 2.60	
With	12-foot	jointed pole 2.90	
With	16-foot	jointed pole 3.45	

No. 777. TWO HAND PRUNER

Our No. 777 is designed on scientific principles and is the result of several months' study and experimental work.

Because of the fact that the majority of men are right handed, we have placed the blade on the opposite side from the general custom.

The blade positively will not cut or dig into the hook. The blade will not push the branch from between it and the hook. By dropping the hook considerably below the center line we have produced a positive draw cut superior to any other, with an opening between blade and hook allowing a straight thrust at the branch.

This is a tool of class, with more desirable features and easier cutting qualities than have ever before been combined in a single tool.

No. 777

Price \$1.65. Postpaid \$1.80.

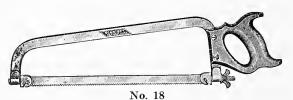
No. 82. HANDY SNIPS

Forged from best Norway Iron, laid with high grade steel, 7 inches long.

Price 75c. Postpaid 80c.

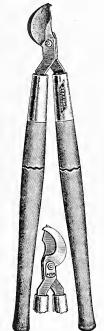


No. 18. HAND PRUNING SAW

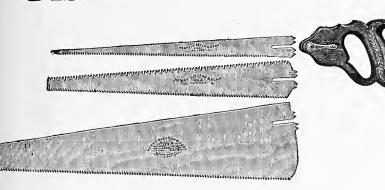


In order to make our line of pruners complete, we have added a bracket hand pruning saw, with a blade so arranged as to be turned instantly to any angle.

Price \$1.40. Postpaid \$1.50.



DISSTON'S PRUNING SAWS



DISSTON'S HANDY KIT No. 107

This kit consists of one 20-inch cross-cut blade, one 14-inch compass blade, one 16-inch pruning blade, and handle, all contained in a neat canvas case.

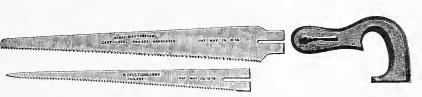
Price \$2.50 Postpaid \$2.65

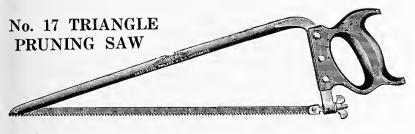
DISSTON'S No. 2 NEST OF SAWS

This Nest of Saws consists of one 16-inch pruning blade with champion cleaner tooth, one 14-inch compass blade, and handle.

Price 85c. Postpaid 95c.

One additional 12-inch keyhole blade will be included in this kit for 20c additional.





Oval steel back, straight tapered point, Beech handle, varnished edges, three brass screws. Handle has extra large grip for use with gloved hand. Blued steel blade. Length of blade 20 inches center to center of holes.

Price \$1.10 Postpaid \$1.25

No. 40. DUPLEX PRUNING SAW

An extremely handy tool for pruning. The well tempered blade combines two cutting edges—a fine tooth edge for dry pruning and a coarser edge for green pruning. The blade is secured to the Beech handle by three brass screws.



Prices-16-inch 90c, postpaid \$1.00; 20-inch \$1.00, postpaid \$1.10.

"THE ORCHARD" PRUNING HOOK AND SAW



The Knife and Saw are made of the best Crucible Steel, and can be used with or without a pole. Although possessing great strength, it is of light construction, with crescent-shaped blade having long, slender teeth, so formed as to draw the saw into the wood.

It is particularly adapted for sawing the smaller branches in general pruning.

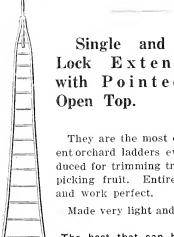
The Saw Blade, which is attached to the Hook by two clamp-screws, can be readily removed when the Hook only is required.

Malleable iron handle, Japanned, with socket. Length of Blade, 10 inches. Hook will take in Branch one-half inch diameter.

Hook and Saw (without pole) \$1.60. Postpaid \$1.70.

Tilley's Fruit Picking Ladders

OMEGA TRIPOD STEP LADDER



Single and Bale Lock Extension with Pointed or

They are the most convenient orchard ladders ever produced for trimming trees and picking fruit. Entirely new

Made very light and strong.

The best that can be produced.



PER STEP, 26c.

SINGLE LADDERS.

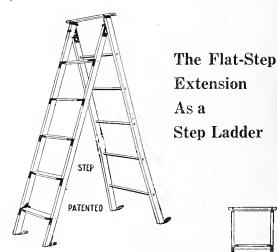
C	pen Top	Pointed Top
10 t	foot\$1.60	13 foot\$2.10
12	" 1.90	15 " 2.40
14	" 2.25	17 " 2.75
16	" 2.60	19 "· 3.25
18	" 3.00	21 " \dots 3.50
20	" 3.40	Point included in
.22	" $\dots 4.00$	above measurement

. EXTENSION ,LADDERS-OPEN TOP

24	ft.	extends	to	21	ft.	 				. :	\$5.00
26	ft.	extends	to	23	ft.	 					5.50
28	ft.	extends	to	25	ft.	 					6.00
30	ft.	$_{ m extends}$	to	27	ft.	 					6.25
32	ft.	${\it extends}$	to	29	ft.	 					6.75
34	ft.	extends	to	31	ft.	 					7.25

EXTENSION LADDERS—POINTED TOP

23	ft.	extends	to	20	ft.	 	 		. 9	34.75
25	ft.	extends	to	22	ft.	 	 			5.25
27	ft.	$ {\rm extends} $	to	24	ft.	 	 			5.75
29	ft.	extends	to	26	ft.	 	 	٠.		6.00
31	ft.	$_{ m extends}$	to	28	ft.	 	 			6.50
33	ft.	extends	to	30	ft.	 	 			7.00
35	ft.	extends	to	32	ft.	 	 			7.25



The Flat-Step Extension

EXTENDED

The only Flat-Step Extension Ladder that can be extended a step at a time to twice its length and possessing a step-ladder combination.

The most practical and convenient short extension ladder made, allowing the user to stand on a flat step while at work. As a step-ladder both sides can be used with convenience and safety. Comes apart, giving two straight ladders, or can be telescoped to one-half its length.

Lengths 14, 16, 18, 20 feet.

PRICE PER RUNNING FOOT, 20c.

Improved Steel Barrel Headers or Fruit Presses



No. 8 WYMAN LEVER PRESS.

A simple, patented device has enabled us to combine the best features of both screw and lever barrel headers in the No. 8 WYMAN. Hitherto the principal objection to a lever barrel header was the absence of a retaining feature to hold the pressure rigidly at any given point without the aid of the operator. This is entirely overcome by the simple, automatic locking device which can be used or not at the pleasure of the operator.

This combination makes the No. 8 WYMAN the best barrel header on the market.

Price \$1.75

No. 5 Screw Press with Reinforced Frame

The extra reinforcements (not shown in illustration), make the No. 5 very strong and rigid and greatly increase its durability.

Price \$1.75









We make a specialty of Fruit Packages, all kinds and sizes to suit the gardening and fruit growing trade in Western Pennsylvania, among which are the following:

Berry Baskets Diamond Market Baskets Grape Baskets

Berry Baskets Diamond Market Baskets Grape I Stave Baskets Hand-Made Baskets When you are in the market for Baskets, please ask us for prices.

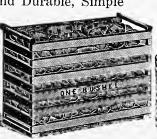
CUMMER FOLDING FRUIT AND VEGETABLE CRATE

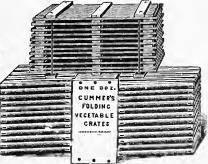
Made of Heavy Slats for Constant use as a Field or Storage Crate.

They are Light, Strong and Durable, Simple and Easily Folded. No Nails,

and Easily Folded. No Nails Screws, or Tools Required.

Size of crate (out side) 117/8 in. wide, 20½ long, 13½ in. high. Size of slats 5/8x15-16 with corners rounded. Holds one bushel.





PRICES.

1 Crate......30e; postpaid \$0.45 1 dozen Crates3.00 50 Crates\$11.50 100 Crates22.00

We will deliver these crates at your railroad station in lots of 50 or 100 at the above, prices.

GARDEN AND LAWN SUPPLIES







No. 211

No. 215

No. 217



GARDEN TROWELS Forged Steel 5 in., 40c; 6 in., 45c; 7 in., 50c; nostpaid 5c

		1 orgen beech o mi, rec, o mi, rec, i mi, ouc, postparu de extra						
Vo.	217	Transplanting 6 in., 10c; 7 in., 15c; 8 in., 15c; postpaid 5c extra						
	215	English Pattern—6 in						
٧o.	217-A	Transplanting Hoe—7 in						
DIDDIEC								

218 Wood Handle Usual Size

110. 410	wood francie, Usual Size	Ш
No. 219	Wood Handle, Small Size	
No. 2180	Wood Handle, Brass PointsPrice 75c; postpaid 85c	
No. 220	All IronPrice 40c; postpaid 55c	

No. 217 A

The Eureka Garden and Hot Bed Seed Drill

It will sow and cover Beets, Cabbage, Carrots, Celery, Lettuce, Onions, Radishes, Spinach, Turnips and all such seeds with the greatest regularity. The quality of work equals that done with the costly machines and is infinitely better and faster than hand work.

Have You a Hot Bed?

It is the only machine suited to sow in a hot bed. Sows up close to the sides in straight rows. Sows the smallest packet of seeds as well as the larger bulk.

FORCE FEED

No. 218 and 219 No. 220

Price \$1.00. Postpaid \$1.10.



ASPARAGUS KNIFE

No. 2500. Used also as a weeder and dande-Price 35c. Postpaid 45c. lion digger.



HOT BED THERMOMETER No. 960-L—With Brass Point

Price \$1.75. Postpaid \$1.90.

The No. 20 All Steel Hose Reel

Finish-Black Japan, carefully baked on. Capacity-100 ft. of Garden Hose. The reel is so placed in the frame that it will not tip over.

Price, \$2.00.

GARDEN RAKES

No. M. S. 14—Malleable	with 14 teeth \$0.40	No. M. S. 16—Malleable	with 16 teeth \$0.45
No. S. 14—Steel	with 14 teeth .60	No. S. 16—Steel	with 16 teeth .70
No. S. 18—Steel	with 18 'teeth .80	No. R-14 Road Rake	with 14 teeth 1.15
	R-16 Road Rake—witl	h 16 teeth \$1.25	
	CDADING	TODICO	

SPADING FORKS

						K	
4	Tine	Malleable	"D"	Handle,	Diamond	Back	.90
						SPADES	

Polished Short D Handle 71/4x12 inches—square point

SCYTHES AND SNATHS

SCIINES AND SNAIDS	
German Scythes, American style	\$1.25
Bloods Champion Weed Scythe	1.00
Bloods Champion Brush Scythe	1.00
German Snath	1.15
No. 00—Patent Snath	1.00
No. 100—Brush Snath double ring and plate	1.00

"NORCROSS" GARDEN CULTIVATOR HOES AND WEEDERS.

PRONG CULTIVATOR HOE

Prongs are 1/4 inch square Spring teel, bent cornerwise for strength, and attached to Malleable Head with 4) bolts standard size. Works beween rows or center shovel can be emoved and row straddled. Loosning nuts release any one or more orongs without removing bolts.



Universal Connection to attach to Iron Age, Planet Junior and Slotted Frame Plows and all vertical leg plows extra 15c; postpaid 20c.

(IIEI) Price 50c. Postpaid 60c.

3 PRONG CULTIVATOR HOE.

The "NORCROSS" 3-Prong Cultivator-Hoe is a modification in size, weight and Weight 2 pounds, 4-foot handle (Light price of the 5-Prong Tool, as represented by the accompanying cut.

MIDGET WEEDER.

This little weeder is constructed along the same lines as our 3 and 5 prong Cultivator Hoes. It has a 9-inch handle and is designed for use in flowers, small shrubbery, etc., or for cultivating small vegetables where a long handle tool would be less practical.



Price 30c. Postpaid 35c.

Cleveland Lawn Weeder

NO MORE BROKEN BACKS—This Little Device Gets at THE ROOT OF THE EVIL And Removes it Bodily.

The curved edge of the blade enters and loosens the Soil, pressure on the lever then causes the toothed jaw to grasp the plant and a slight pull suffices to dislodge it. without disturbing the surrounding sod.

Price 60c. Postpaid 70c.

lehler's Handy Gardener

& Cultivator In One An entirely distinct tool 5½ ins. wide with a special handle 4½ ft. long; entire weight 2 lbs.

Hoe, Rake, Weeder

Note the comfortable position and special arrangement of the five teeth, which allows cultivation closer to the plant than any other device, and at the same time on three sides at one

No hoe is needed where this tool is used; just the thing for working among flowers and young vegetable plants. Send for descriptive

circular

Price 75c; Postpaid 85c.

ERADO Weed Exterminator

ERADO does away with the old-fashioned laborious and back-breaking method of digging up dandelions and weeds of all kinds by hand.

It makes obsolete all implements that only

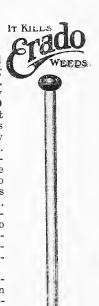
pull the tops off of the plants. Before ERADO was introduced there was no weed-killer that absolutely killed the roots of noxious weeds as well as destroyed the tops. With this handy tool the dandelion or weed is completely killed.

An amount of weed-killing solution is dropped on the root; then by turning the tool the top of the plant is cut off. ERADO has two knives so placed that the top of the plant is cut off by only one-half turn of the tool. Weed-killers that have only one knife necessitate a complete turn that makes it necessary to change the grip on the handle of the tool be-cause a person's wrist will not allow the im-plement to be turned completely around without changing the hand.

It is a simple matter to refill ERADO. Remove the handle by a half turn. The solution is then put in the tube and handle is easily replaced.

PRICE.

Galvanized iron cylinder, brass tip, iron handle, \$1.00; postpaid, \$1.15.



GARDEN HOSE

BULL



DOG -

Bull Dog ½ in. 7-Ply Garden Hose is the most famous brand on the market. It is the recognized standard and is well known as "The kind that lasts longest."

Letters come to us frequently telling of lengths in service 14 or 15 years. Money

cannot buy a better Garden Hose than Bull Dog.

In 25 and 50 foot lengths with standard 3/4" couplings included..18c per foot

MILO



MILO

MILO is a corrugated moulded hose, made by vulcanizing whole seamless tubes, not merely strips of pure gum rubber, together with double braided jackets of tightly twisted cotton into a solid unified hose of great strength and durability. Cut in any lengths desired, no couplings included.

Price 15c per foot.

GOOD



LUCK

Good Luck % in. 6-Ply Garden Hose is the biggest value on the market. Nothing approaching its quality has ever been offered at the price.

Good Luck hose is constructed similar to Bull Dog and is "Built to stay alive." Here is real value for the customer who can afford only a moderate price. In 25 and 50 foot lengths, with standard 3/4" couplings included. .12c per foot.

BOSTON



NOZZLE

The Boston Spray Nozzle is built to last; it gives the utmost satisfaction. None better made. Your Garden Hose Line is incomplete without it.

Price 60c Postpaid 70c

Spray Hose

BULL



DOG

Bull Dog hose was thoroughly tested with numerous mixtures of blue stone, mineral oil and arsenate solutions before being put on the market.

A strictly first-class hose for power sprayers.

½ inch 7 ply, 18c per foot.

Philmore Spray Hose

Philmore Black Spray hose for Hand or Power Sprayers. Continuous lengths which can be cut and coupled in any length desired by the user.

1/2 inch, heavy ply, 15c per foot.

Suction Hose

		Per	r it.
3/4	in.	Tiger Hard Rubber\$	0.21
1	in.	Tiger Hard Rubber	.24
$1\frac{1}{4}$	in.	Tiger Hard Rubber	.30
2	in.	Granger Wire Lined, in 15 and 20 ft. lengths	. 35
2	in.	Cowan Wire Lined, in 15 and 20 ft. lengths	.50

Sunlight Double Glass Sash

HERE IS A SASH YOU DO NOT HAVE TO COVER

The Two Lavers of Glass Do All the Work.

They enclose an air space $\frac{5}{3}$ inch thick, thus forming a transparent blanket. This keeps out the cold air at night better than single glass and boards or mats and it saves all the labor and expense of covering and uncovering. At the same time it lets in all the light all the time. Every gardener knows how valuable this is.



The glass slips in and is securely held by stops and springs that any one can easily adjust. No putty is used and any breakage can be repaired in a moment. The double glass makes the earliest, strongest and best plants, and the Sunlight Sash, which will last a life-time, pay for themselves in extra market receipts every season they are used.

For the amateur as well as the professional gardener these sash are a great improvement.

Prices: F. O. B. cars Pittsburgh. 3x6 Size.

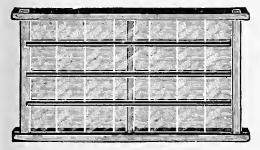
Painted with	two	coats	White I	Paint	without glass\$2.75 e	ach
Painted with	two	coats	White I	Paint	with glass in boxes 4.65 e	ach

On orders for five Sash and upward, we make the following reductions from the above prices.

On orders	for	5	Sash		5c	per	Sash	
On orders	for	10	Sash]	10c	per	Sash	

On orders for 20 Sash....15c per Sash On orders for 40 Sash.....25c per Sash

METROPOLITAN SINGLE LIGHT HOT BED SASH



For 4 rows single layer putty sash, either 6x8 or 8x10 glass can be used. These sash are 3 foot 2 inches by 7 foot long made of best cypress wood, with cross bar in center and with

Prices: F. O. B. Pittsburgh.

Unpainted	without	glass	1 to	5	sash	.\$2.15
Unpainted	without	glass	5 to	10	sash	2.05
Unpainted	without	glass	10 to	20	sash	1.95

Special prices on larger quantities.

Glass for Hotbed Sash R Single Strangth

b bingle butength.
6x 8, per box, 150 lights\$3.00
8x10, per box, 90 lights 3.00
10x12, per box, 60 lights 3.00
10 boxes and upward, 10 cents per box less
than above prices.

Peerless Glazing Points

Used by all practical florists and marketgardeners for glazing hotbed sash.

No. 1. For small, single-thick glass. No. 2. For large, single-thick glass.

Either size, 1,000, 60c; postpaid 70c.

MASTICA

Mastica is elastic and tenacious. In a few hours after use, a skin or film is formed, preventing the evaporation of the oils and leaving it pliable for years. On account of this quality it admits of the expansion and contraction, which is continual in the woodwork of a greenhouse, from moisture and heat. One gallon will cover about 290 running feet, one side.

Quart can	Postpaid \$0.55
½-gallon can	Postpaid .95
Gallon can	1.40
MASTICA GLAZING MACHINE For appling Mastica\$1.50	Postpaid \$1.65

DIRT BANDS AND PAPER POTS

ROUND

You cannot get all of the money out of early vegetables without the use of Dirt Bands or Paper Pots. Melons, Sweet Corn, Lima Beans and Cucumbers may be started in Paper Pots or Dirt Bands under glass and will be ready for market three to four weeks earlier.

At the Indiana Experiment Station, tomatoes in dirt bands ripened nine days earlier and yielded four tons more per acre.

The bands are simply paper pots without bottoms; seeds or plants are put into them and by the time they are ready to plant out, the pots hold the dirt together and the plant is put into the ground without taking out of the band.

Tomatoes, Egg Plants and Peppers if in bands or pots may be transplanted to the open ground without waiting for rain and absolutely no check in the growth of the plant.

Progressive gardeners everywhere are making big money by using dirt bands. Why not you?

Price of Round Dirt Bands Postpaid						
Either 250—2 in. Either 600—2 in.	200—3 in. or 500—3 in. or	150—4 in\$1.00 400—4 in 2.00				
Price by Freight	or Express F.	O. B. Pittsburgh				
	1,000	5,000				
2 inch	\$1.5 0	\$ 6.25				
3 inch	2.50	11.25				
4 inch	3. 50	16.25				

Prices of Round Paper Pots F. O. B. Factory 1,000 5.000 Shipping Weight

		1,000	5,000	Shipping weight
2	inch	\$1.75	\$ 7.50	12 lbs. per 1,000
3	inch	2.75	12.00	18 lbs. per 1,000
4	inch	3.75	17.50	27 lbs. per 1,000
5	inch	5.25	25.00	42 lbs. per 1,000

Folding blocks and tacks included in above prices.

SQUARE

These dirt bands being square brace each other and cannot get out of place. They are not hard to get off when you want to set out the plant.

Our Square Dirt Bands and Pots hold about 27 per cent more soil than round ones sold for the same size, and have therefore 27 per cent more root room to make stronger plants.

Twenty-seven per cent heavier plants will yield a much heavier crop.

Prices of Square Dirt Bands Postpaid

Either	500	2-in.,	350	3-in.	or	300	4-in	\$1.50
Either	1000	2-in.,	750	3-in.	or	650	4-in	2.50

Price by Freight or Exp	ress F. O. B. Pittsburgh	Price of Square Paper	Pots F. O. B. Factory
1,0	5,000	500	1,000 5,000
2 inch\$1	.35 \$ 5.50	2 inch\$0.90	\$1.50 \$ 6.00
3 inch 1	.85 8.00	4 inch 2.75	3.75 17.00
4 inch \dots 2	.25 9.50	5 inch 4.00	6.00 27.00
5 inch 2	.75 12.50	6 inch 5.25	7.50 32.00
6 inch 3	.35 15.00		

No tacks or folding blocks needed.

Tacks and folding blocks included.

Shipping weights are same as the round styles.

Any of above pots holds slightly more than a clay pot of corresponding size.

Our VEGETABLE AND FLOWER SEEDS are grown for us by the most reliable and experienced growers in Europe and America. Our customers will find them true to name and of high quality. Prices on these will be found on pages 59 to 68 of this catalogue, and to all who request it, we will send our special VEGETABLE AND FLOWER SEED catalogue which gives full description of the different varieties and directions for culture.

Our POULTRY SUPPLY Department includes a full line of the latest improved requisites for Poultry Raising and Egg Production, including an unsurpassed line of poultry feeds. These are fully described in our 76-page poultry supply catalogue, which will be mailed free on request.

THE SAXMAYER VEGETABLE TYER

The Saxmayer Vegetable Tyer is no longer an experiment, as is testified by hundreds of satisfied customers, but is an essential part of every successful market-gardener's equipment. It will save the labor of from three to six persons per day, or a money saving of from \$4 to \$8 per day. The machine will pay for itself in a very few weeks.

The machine somewhat resembles, and is but little larger than a sewing machine, requires less power to run, and may be operated by treadle or driven by belt with a motor or gas engine. It may be kept in constant motion and automatically ties and releases each bundle only when it is placed in position for tying. It works so easily that a child can do more work with it than a number of grown persons could do by hand in the same time. The operator sits comfortably at the machine and does his work in perfect ease.

The machine ties any kind of bunch vegetables except the large dozen-bunches of celery. It uses either a four-ply cord or, by changing the knotter bill, a No. 13 tape.



THE SAXMAYER VEGETABLE TYER
Patents Pending

A word in regard to the Saxmayer Vegetable Tyer purchased from you last season. The Saxmayer is a great machine to save time. With it we can tie as fast as two men can handle the bunches, or as fast as four men can tie in the ordinary way. This is a saving of three men. We can tie about 120 dozen in an hour with the motor power which we use. We are very much pleased with the Tyer, and would not like to do without it.—Andrew Newland & Bros., Millvale, Pa., December 14, 1914.

We consider this one of the best labor-saving machines we have in our garden. It has given entire satisfaction. We have bunched 85 dozen bunches of carrots per hour, 55 dozen bunches of beets, and 65 dozen bunches of rhubarb, tying rhubarb at both ends. This work was done by two men making the bunches with one man working the machine. We use one-eighth-lorse-power water motor to run the machine.—Dickson Bros., Gardeners, Neville Island, Pa., December 15, 1914.

We cannot praise the "Vegetable Tying Machine" any too highly. We think the Saxmayer Tyer a wonderful machine for besides doing the work in less time it saves a vast amount of labor. It is no trouble to tie 60 to 80 dozen bunches of beets, carrots and onions per hour. We think the machine paid for itself in less than two weeks.

We run the machine by power and when it is in operation the work is done very quickly as its speed is unlimted.

We intend getting another tyer when the season opens this spring. Geo. W. Beckert & Co., Pittsburgh, Pa., February 10, 1915.

In regards to your Saxmayer Tyer I will say after having made use of it all summer but for all it was a little complicated at the first trial it has proven a success in my business and proven the best hired man at bunching time.—C. Reutzel, R. F. D. No. 5, Ewalt Station, Pittsburg, Pa., December 8, 1914.

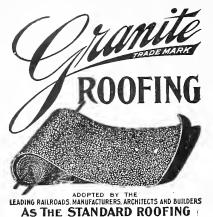
Elm Grove, W. Va., November 22, 1915.

I wish to say a few words in regard to the Saxmayer Vegetable Tyer purchased from you last season. I am very much pleased with it. It saves me the wages of one hired man and is always there to do its work when needed. During the biggest rush I can get the bunching done in good time without working half the night. The machine has more than paid for itself during the past season in saving of time and labor.

Respectfully yours,

JOHN F. BOTT.

WOOL FELT-



WRITE FOR TESTIMONIALS, PHOTO-PAMPHLET AND SAMPLES.

E can refer to buildings in our own city, as well as throughout the United States, which were covered with "Granite Roofing" from 9 to 12 years ago, and are still in good condition, without the expenditure of one dollar for repairs. The fact that it is used on large factory buildings, round houses, glass houses, etc., proves its good qualities. We do not hesitate to recommend it to agriculturists and poultrymen as the best and most economical roofing on the market. It is prepared all ready to lay when it leaves the factory, and can be put on over old shingles or tin. It can be used for siding as well as roofing.

Each roll contains 110 square feet, or sufficient material to cover 100 square feet of surface, allowing for laps. Nails and cement for laying are included in the following prices:

Less than 10 rolls, per roll\$5	2.85
10 rolls or upward, per roll	2.65
Mops for applying cement, extra, each	.25

On shipments of 10 rolls or upward from factory, freight will be allowed to customer's railroad station.

Please note that "Granite Roofing" comes ready to apply. No coating necessary after it is put on.

EVERTITE ROOFING

A HIGH GRADE READY ROOFING OF GREAT DURABILITY, WITH A TOP SURFACE OF CRUSHED ROCK, WHICH REQUIRES NO PAINTING OR COATING.

Evertite is sold in rolls of 110 square feet which is sufficient to cover 100 square feet of roof, including ample laps. With each roll we send 1½ pounds large head nails; 7 pounds roofing cement.

PRICES.

Less than 10 Rolls, per Roll....\$2.60 10 Rolls and upward, per Roll....\$2.45 On shipments of 10 Rolls and upward direct from factory, freight will be prepaid. Sample mailed free.

If you are interested in Roofing write us for samples and full descriptive circulars

BARRETT'S PREPARED ROOFING

BLACK DIA	MOND
3-Ply, Felt only, about 70 lbs. per square 2-Ply, Felt only, about 45 lbs. per square	
MONONGA	HELA
3-Ply, Felt only, about 60 lbs. per square 2-Ply, Felt only, about 40 lbs. per square Note—We recommend the use of two gallons I every square of above roofing.	
Roof Coating, 1 gal. can	Tin Caps, per lb

ATLASTING COLD JAPAN PAINT

For Tin, Iron and Steel Roofs, Bridges, Fences and Paper Roofs.

One good coat will stop most any leak in the roof. Japan Paint and patch of muslin or canton flannel will stop bad leaks in roofs, gutters, etc.

Ready for use.-No stirring required.-Anyone can put it on. Made in three colors.

PRICES.

	Black.	Maroon.	Red.
1 gallon can 2 gallon kit 3 gallon kit 5 gallon kit 10 gallon kit Half barrels, 30 gallons Barrels, 50 gallons	\$.60	\$.95	\$ 1.00
	1.15	1.80	1.90
	1.75	2.65	2.80
	2.50	4.00	4.25
	5.00	7.75	8.25
	10.00	21.75	23.25
	16.00	35.00	37.50



The "BIKE" GRINDSTONE

All steel frame with malleable trimmings. Double Pedal, roller bearing, spring seat, easy running, operator has three times the power over single pedal. One man can easily do the work of two.

Rigid, Strong, Non-Destructible.

Best Grit for Grinding SCYTHES, KNIVES, AXES, ETC.

No. 1 Stone. Weight 65 to 80 lbs.
Price, \$6.00

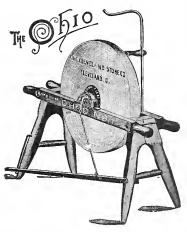
No. 2 Stone. Weight 80 to 110 lbs. Price, \$6.50

Ohio Mounted Grindstone

Specially Selected Stone.

The frame is made of the best seasoned hardwood. The legs are securely gained into the sidebars and fastened by a bolt. The ends of the sidebars are neatly turned to serve as handles.

Prices.





(BALL BEARING)

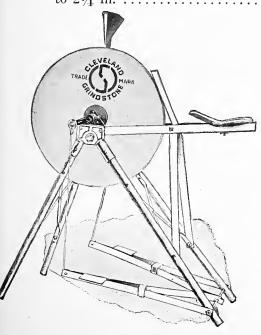
A steel tubular frame, mounted grindstone. Ball bearing throughout. Is absolutely the best mounted grindstone on the market.

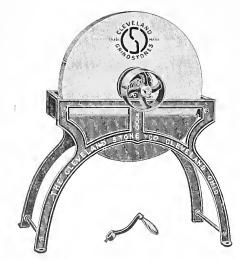
A double treadle frame embracing the bicycle features of our bi-treadle. All rods and bolts are threaded; there are no cotter pins and no loose parts. Permanent rigidity is insured. Provided with a large comfortable seat and clothes protector.

Fitted on crank and shaft with improved ball bearings—encased—consisting of a heavy steel ball casing and a cone or sleeve, turned out of solid cold rolled steel shafting—balls cannot work loose or drop out.

Stone. Weight, 50 to 60 lbs.

Price \$5.50





The Empire Power Grindstone

The Empire Ball Bearing Power Grindstone is designed to meet the needs of the farmer who desires a grindstone to be operated by a gasoline engine. The Empire not only possesses the needed strength and staunchness to withstand the strenuous service of every day use, but is of light weight and easily handled.

The Empire is equipped with genuine Berea Stone, 24 inches in diameter and 2 inches to 3½ inches thick. This is the most efficient and the best grit produced for general use and especially for farm tools.

Weight complete, about 225 pounds. Price complete, with pulley and crank handle,

\$13.50

Improved Ball Bearing Family Grindstone

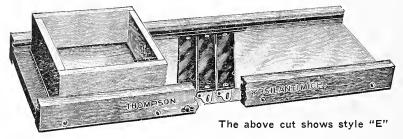
The best family grindstone made, without exception. Supplied with a fine specially selected Berea Grindstone, turned and rubbed smooth, mounted on a steel shaft and steel ball bearings. Prices no higher than for the ordinary style.

Prices.

8 inch	\$1.25	Postpaid	\$1.45
10 inch	1.50	Postpaid	1.70
12 ineh	1.75	Postpaid	2.00



KRAUT CUTTERS



Made of extra quality Sugar Maple
Sanded so they are very smooth
Finished in the white
Perfectly fitted sliding box; heavy steel
stampings

Stampings tinned to prevent rusting
Tool steel knives with polished cutting edge
Knives red enamel finish up to edge
Thickness of cut instantly changed

Knives held firmly in position by lock nut
Knives sharpened without removing
No slots or holes to fill up and clog the
machine

The simplest, cleanest and most perfect Cutter.

Sure to give satisfaction Can be set and used by anyone

BEST QUALITY WOOD-WORK, RED ENAMEL, HEAVY KNIVES, PERFECT CONSTRUCTION, EACH KNIFE ADJUSTED SEPARATELY.

		Size	9	Price	Postpaid
No. 9B	2 knives	9 x24 i	nchesEach	\$0.85	\$0.95
No. 55E	3 knives	9 x26 i	nchesEach	1.25	1.35
No. 70E	3 knives	13½x36 i	nchesEach	3.00	3.20
No. 50T	2 knives	9 x26 i	nchesEach	1.00	1.10
No. 70T	3 knives	1316x36 i	nches Each	3.15	3.35

The Genuine Philadelphia Lawn Mower

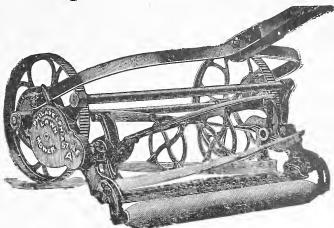
4 Blades, $10\mbox{-inch}$ Wheel, $6\,\%\mbox{-inch}$ Cylinder, Train of 4 Gears, Double Ratchet.

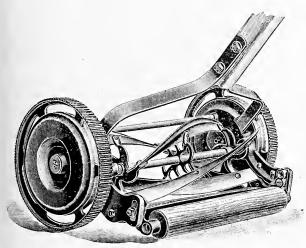
Style "A" All Steel

This is the lightest draft Lawn Mower made, and, being made entirely of steel, it is by far the most durable. It has no competitor.

PRICES

15	inch	\$13	3.25
17	inch	15	5.00
19	inch	10	6.50
21	inch	13	8.00





WIZARD BALL BEARING LAWN MOWER

In the WIZARD we offer a high grade Lawn Mower at a low price. It is equipped with 9 inch drive wheels, four tempered tool steel blades with crucible tool steel under knife, hardened and tempered. The patent cone adjustment has overcome what heretofore has proved a serious objection to all Ball Bearing Mowers.

PRICES

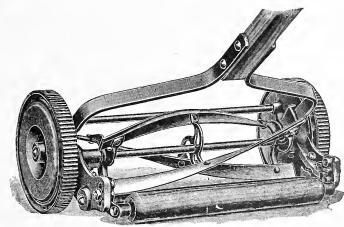
14	inch											\$5.00
16	inch											5.25
18	inch											5.50

BLUE GRASS LAWN MOWER

The Blue Grass Lawn Mower has 8-inch drive wheel, shaft ½-inch diameter in adjustable plain bearing box, and three tempered tool steel knives on reel. In the Blue Grass Lawn Mower we have the best value that has ever been offered in a low price machine.

PRICES

12 inch	 	\$3.00
14 inch	 	3.25
16 inch	 	3.50
18 inch	 	3.75



The "E-Z" Grass Catcher

The "E-Z" Grass Catcher has a galvanized iron bottom. The sides and back are made of very strong canvas, attached to the bottom by our impossible-to-rip connections. The frame is made of ¼-inch galvanized iron wire, with side supports of the same stock.

A universal attachment made of malleable iron, fastens on the yoke of the mower, and is so arranged that it is possible to attach it to any mower, no matter what the diameter of the drive wheel. It is guaranteed to fit perfectly all styles and makes of lawn mowers.

No.	Sizes.			
92-Fits 12.	, 14 and 16 inch	Mowers\$1.75	Postpaid	\$1.90
93-Fits 16	, 17 and 18 inch	Mowers	Postpaid	1.90
94-Fits 18	, 19, 20 and 21	inch Mowers	Postpaid	1.90

EUREKA WAGON JACK

Light in weight but strong in lifting capacity. Small in size but will easily raise a loaded wagon.

It has double acting dogs, what one raises the other holds.

It is positive and quick in its action.

Raises any height desired to 27 inches.

It is 16 inches in height when lowered.

It is lowered by the same handle that raises.

It is constructed of steel and malleable iron.
It is the most durable and efficient Jack manufactured.

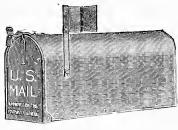
Price \$1.00. Postpaid \$1.15.

Eureka Trolley Jack No. 2

Quick in action, positive in position, great lifting power, always ready, adjustable to many heights, made of high carbon steel and the best of malleable iron. Has no equal in power for its weight. Has three steps, 2, 15 and 20 inches from base; either raises 7 inches. Capacity, 3 to 4 tons.

Price \$3.00. Postpaid \$3.30.

SUPERIOR R. F. D. AND PARCEL POST MAIL BOXES

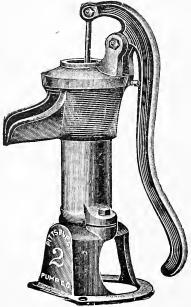


R. F. D. and Parcel Post Boxes open on end, with door hinged at bottom and equipped with automatic steel hasp, keeping it tightly closed and yet easily operated by carrier or patron. Door is so constructed as to be absolutely sleet proof, as shown in cut. Box is fitted with easily operated right angle signal visible at a great distance. This box possesses the highest standard of workmanship and excellence of finish. Substantial and operated perfectly. It is absolutely proof against all weather. Made of 20 gauge Galvanized Sheet Steel.

Finished in weather-proof aluminum bronze. Approved by Postmaster-General.

PRICES

No. 1—R. F. D. Size,	18½" x	7½" x 6¼".	Price\$1.00.	Postpaid \$1.10
No. 2—Parcel Post Size.	23½" x 1	.4" x 11".	Price 2.35.	Postpaid 2.60



Pitcher Spout Pump

Has smooth bore cylinder and brass valve seat, with revolving top, allowing lever to be placed at any desired position, and may be used successfully in cisterns or wells as deep as 25 feet.

	Polished Iron Cylinder	Brass Lined Cylinder	Brass Body Cylinder
No. 1. 2½"	\$1.75	\$3.00	\$4.25
No. 2. 3"	2.00	3.25	4.50
No. 3. 3½"	2.25	3.50	4.75

14" Galvanized Pipe for above, per ft., 16 cents.

IRON AND WOOD PUMPS

REX DEEP-WELL LIFT PUMP

Anti-Freezing.

Constant Flowing.

This is our new pattern deep well pump, fitted with reversible handle and improved compound handle rest. While the pump is designed for deep wells, yet it can be used in cisterns or wells as deep as 200 feet.

			Brass	Brass
			\mathbf{Lined}	Body
Fig.	SIZE		Cylinder	Cylinder
3.	2½ or 3x10	\$5.50	\$7.00	\$7.50
3.	$2\frac{1}{2}$ or $3x12$	\$6.50	\$8.00	\$8.50

If wanted complete with 1¼ inch galvanized pipe and 3% inch galvanized steel rod add to above prices 19 cents per foot for depth of well.

If Three-Way is desired add \$3 to above prices. If Wind Mill Top is desired add \$2 to above prices.

New Fountain Double Acting Force and Lift Pump

Anti-Freezing, for Deep Wells or Cisterns.

The New Fountain is the simplest and most efficient deep-well pump on the market.

Has double air chamber, which enables the pump to throw an absolutely solid stream, just like a hy-

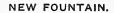
Has smooth bore cylinder and brass valve seat; made to face the front or side by simply loosening set screw at top

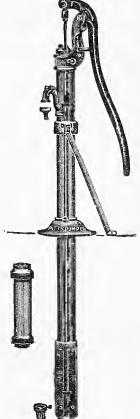
Will go in hole as small as 4% inches. Upper cylinder is brass lined.

				Bras	SS		Bra	.SB
				Line	ed		Bo	dy
Fig.	SIZE		C	ylin	der	(Cyli:	nder
$\bar{5}$.	$2\frac{1}{2}$ x12, $1\frac{1}{4}$	pipe	:	\$11.0	0		\$12.	00
5.	3 x12, 11/4	pipe		11.0	0		12.	00
* .								

If wanted complete with 1½ inch galvanized pipe and % inch galvanized steel rod add to above prices 19 cents per foot for depth of well.

If Three-Way is desired add \$3 to above prices. If Wind Mill Top is desired add \$2 to above prices.





WOOD PUMPS

Length.	Cylinder. Unlined.	Porcelain Lined.
6 ft.	3½ in. \$4.15	\$5.25
7 ft.	3½ in. 4.60	5.70
·8 ft.	3½ in. 5.00	6.15
10 ft.	3½ in. 5.95	7.00
	6 ft. 7 ft. ·8 ft.	7 ft. 3½ in. 4.60 8 ft. 3½ in. 5.00

Tubing for above pumps—4 in. x 4 in. in 8, 10 and 12 foot lengths, per ft., 16c.

Couplings with bands for 4 in. x 4 in. tubing, each 40c.

In ordering give depth from top of platform to bottom of well.

Prices on other sizes wood pumps quoted on request.

CENTURY LOW DOWN TANK PUMP

THE HANDLE is reversible; can be placed on either end, making it a right or left hand pump.

THE SUCTION AND DISCHARGE PORTS are fitted for hose and threaded on the inside for 2-inch iron pipe.

THE BASE is separate from the pump, to which it is firmly bolted.



No. 470. Century
Low Down Tank
Pump, with hose
nipple, hose attachment, hose band and
strainer. Price \$7.50

No. R470, Century Cog Gear Tank Pump with hose nipple, hose attachment, hose band and strainer. Price \$7.75.



REX.

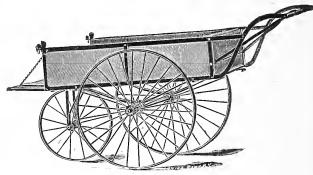
THE MONITOR HAND CART

High Grade Hand Cart needs no introduction to the trade in general, having been on the market and the STANDARD for the past thirty years.

USES—The uses to which these carts are adapted are unlimited, and will pay for themselves in a short time in any manufacturing or mercantile business, and are indispensable to grocers, bakers, laundries, farmers, dairymen, gardeners and general family use. Where the "MONITOR" has once been used there is no more use for the wheelbarrow or any other cart.

CONSTRUCTION—The frames of bodies

CONSTRUCTION—The frames of bodies are made of special carbon steel, riveted together with best Norway rivets. It is light and very strong, with durable first quality basswood box inside, and have fine oil tempered half elliptical springs (two and three leaf as required), and the wheels, nicely painted.



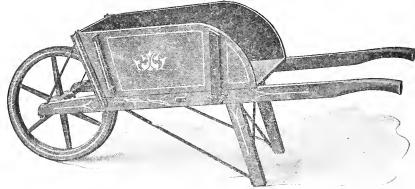
No. 33-DROP END BOARD.

Size inside of body, 39x24 in.; depth 10 in.; 26 in. side, 14 in. front. Capacity, 350 lbs. Price, with Three Steel Wheels, \$11.75; with Wood Wheels, \$14.25.

No. 53-DROP END BOARD.

Size of body, 40×26 in.; depth, 10 in.; 30 in. side, 18 in. front. Capacity, 400 lbs. Price, with Three Steel Wheels, \$12.00; with Wood Wheels, \$14.75.

PITTSBURGH GARDEN BARROWS

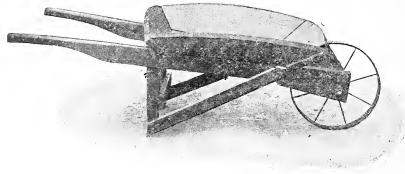


These Barrows are made of thoroughly seasoned wood, have Double Frames, firmly bolted together and iron braced. They are neatly finished and very strong.

PRICES.

No. 1—Large,	Body 30" x 24";	Sideboards :	12" x	30";	Wheels	1¾" x	20";	Price	\$5.00
No. 2—Medium	Body 28" x 20";	Sideboards :	12" x	28";	Wheels	1¾" x	20";	\mathbf{Price}	4.50
No. 3—Small,	Body 28" x 19";	Sideboards I	$12'' \ x$	28";	Wheels	134" x	20";	Price	4.25
No. 4—Boys'.	Body 22" x 18":	Sideboards	9" x	18":	Wheels	11/2" X	153"	Price	4.00

PITTSBURGH RAILROAD BARROW



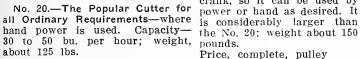
No. 2.

Full size tray, well braced and bolted. Strong leg brace bolted at both ends. Strong steel wheel with ½ inch axle. The best dirt barrow made—will last longer than any other barrow of this kind. All oak; painted red. Front, 9 inches; sides, 9 inches; back, 6 inches. Weight, 50 pounds.

Thompson's Banner Root Cutters

FOR CUTTING ALL KINDS OF ROOTS AND VEGETABLES FOR STOCK FEEDERS Made in eight sizes for hand and power use.



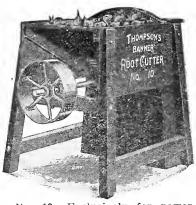


\$10.00



The No. 16 is supplied with balance wheel, pulley and crank, so it can be used by power or hand as desired. It the No. 20; weight about 150 pounds.

Price, complete, pulley and crank\$14.00



No. 10.—Exclusively for power, capacity four to six bushels per minute. Just the machine for large feeders who drive machinery by power. This is a large, strong machine; weight about 300 pounds, Price, complete, for power

use\$24.00 Extra Knives per set...... 1.50 Extra Knives per set.. 1.50 Extra Knives per set...... 2.25

No. 30 NEW BANNER ROOT CUTTER

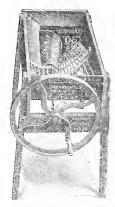
Turns easily by hand. At 60 revolutions, the knives hit and cut the roots 1800 times. The result being at a low estimate 1½ to 2 bushels per minute of cut feed. Cut feed left in long half round slices that has made the Banner

Root Cutter a popular machine for this work for 20 years.

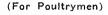
A glance at the cut of this New Root Cutter showing the large capacity of the Hopper, 39 in. long, 18 in. wide and 18 in. deep at the lower or cutting end. The long drum with 30 knives attached. The gravity Slant of the inside of Hopper. The open bottom with iron rods and open cutting grate to allow dirt to escape without mixing with cut feed, and the fact that the largest mangles or sugar beets, turnips, potatoes, carrots and any other roots that are fed to stock can all be handled with this machine and left in the best possible shape for feeding at so fast a rate that the results are surprising.

For best results this machine should be run from 60 to 75 revolutions. It works best if run slow. Weight 175 to 180 lbs.

Price of No. 30 complete,	with 10 extra knives\$	16.00
Flanged Pulley for power,	(12x3)	2.00
Knives, per set of 30		2.25



No. 7 BANNER ROOT CUTTER





Prominent Poultry Men all over the country have taken up the matter of Green Food for their fowls. It is in fact a hen's natural food. It is a great egg producer in itself, because it keeps the body of the hen in a good healthy condition, and healthy hens are the only egg-producers, no matter what the breed. Not only do roots make healthy hens, but their economy as food is astonishing.

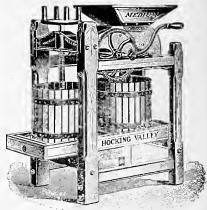
It cuts fast, fine and is easy running. Leaves the feed in fine ribbon-like strips that make choking impossible. Fowls, large or small, can safely eat the feed. The knives are adjustable and made of the very best of steel. An iron grate in bottom of hopper lets dirt and gravel escape before reaching the knives. In this cutter we offer the poultrymen a low priced, high grade, nicely finished and mechanically constructed machine, and feel that anyone who desires to feed Roots and Vegetables to their flocks can well afford to own one. Two to five minutes will cut enough feed for a large flock of fowls. Weight 50 pounds.

Price No. 7.....

Hocking Valley Cider Mills

In Hocking Valley Cider Mills we adapt the principle of the large hydraulic presses to a hand mill. The grinding device consists of a hardwood cylinder, revolving rapidly, with serrated steel knives running lengthwise, which break down the Juice cells and make a pomace that yields under the press every particle of juice in the fruit. A quart of water will clean it after using. An important feature of the mills is the absence of metal of any kind to rust and impair the quality of the cider. We guarantee them to be entirely satisfactory in every respect, in execution, ease of operation, capacity, in durability and finish. They are made in the following sizes:

Bantam Mill 1 TubPrice	\$ 9.50
Junior Mill 2 TubsPrice	14.00
Medium Mill 2 TubsPrice	18.00
Senior Mill 2 TubsPrice	21.00
Senior Mill 2 Tubs for powerPrice	22.00



The Hocking Valley Wine Press



Is constructed of strictly high grade hardwood lumber, is thoroughly well made and handsomely finished. While we are in position to furnish it in several sizes, from the smallest to the largest, including the geared screw press, we give below the three sizes most in demand.

No. 1. This has a 1-inch screw, and the crate or tub is 10½ inches high and 8½ inches in diameter. Its capacity of course is limited, but evidently sufficient to meet the wants of a good many, as we have a generous trade on it.

No. 2. This size has a $1\frac{1}{4}$ -inch screw, and the crate or tub is 12 inches high and $10\frac{1}{2}$ inches in diameter. This is the size preferred for general family use and most in demand.

No. 3. This size has a $1\frac{1}{2}$ -inch screw, and the crate or tub is 15 inches high and $15\frac{1}{2}$ inches in diameter. It is used where greater capacity is wanted.

No.	1	\mathbf{Price}	\$ 7.25
No.	2	Price	9.00
No.	3	Price	11.25

Standard All-Steel Dry Measures









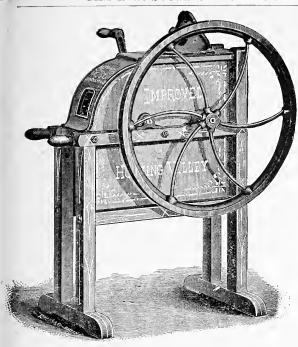


STYLE "B" (Low Shape)

Capacity	Diam.	${f Depth}$	Price	Postpaid	Doz.
Quart	5 5-16	3	\$0.20	\$0.25	\$2.00
2 Quarts	6 5-8	3 7-8		.30	2.50
4 Quarts	8 1-2	4 3-4		.40	3.25
8 Quarts	11	5 5-8		.45	3.75
16 Quarts	13 39-40	7 1-24		.75	6.00

STANDARD DRY TIN MEASURES

	Price	Postpaid			Price	Postpaid
¼ Pint\$	30.25	\$0.35	1 Quar	t	.45	.55
½ Pint		.45	1 Pint		\$0.40	\$0.50
, =			\$0.65	\$0.75		



HOCKING VALLEY TWO-HOLE SHELLER HAND FEED

The Hocking Valley Two-Hole Sheller is intended to be used either by hand or with power. It is a hand-feed sheller with a capacity of about thirty-five to forty bushels an hour, and is always furnished with crank, fan, feed table, and pulley. All the qualities which make our One-Hole Sheller such a favorite are embodied in it. The proper speed of the sheller is about 100 revolutions of the crank shaft, or 300 revolutions of the balance wheel shaft a minute. As ordinarily sent out, it is furnsihed with an 8-inch pulley, and both shafts are extended.

Prices.

With Crank, Belt Wheel, Fan and Feed Table \$18.



Corn Shellers

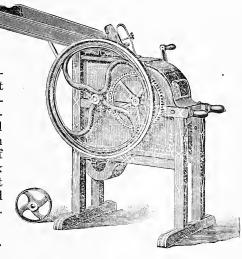
HOCKING VALLEY

ONE-HOLE SHELLER.

The Hocking Valley One-Hole Sheller is the standard sheller with which all others are compared. It fully deserves all its popularity. It is carefully made of the best material that can be gotten, and is always perfectly satisfactory in its working. It is furnished either with or without fan, feed table and pulley, and has a capacity of from twenty to twenty-five bushels an hour.

Prices.

With Fan	. \$8.50
Without Fan	. 8.00
Feed Table, extra	55
Belt Wheel, extra	. 1.10



BLACK HAWK

The Black Hawk Corn Sheller has enclosed hopper and separator. This prevents scattering of the shelled corn. A wonderfully fast and easy running sheller. Instantly fastened to barrel or box by two large strong clamps with wing nuts. Price, \$2.00. Postpaid, \$2.25.

Red Chief Corn Sheller

Has patent oval-shaped teeth, shelling the corn without cracking the grains. Shells clean, taking off less chaff than any other sheller.

Clamps on barrel or tub as well as on box.

Requires no wrench. Tension directly on cob, not on hopper, which makes sheller run very easy, no force being required to expand a hopper.

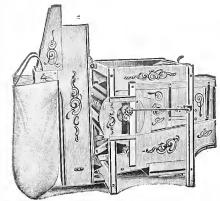
Price \$1.75. Postpaid \$2.00.



The Chatham Grain Grader and Cleaner

.The New Chatham Fanning Mill is the most perfect implement yet devised for cleaning, separating and grading seeds and grain.

It is a combined grain separator, grader, timothy seed saver and fanning mill. It is equipped with 17 screens and riddles and is manufactured from the very best material obtainable, including malleable iron castings of the very best quality, of double Japanned wire-cloth and very heavy No. 9 zinc.



There is no grain or seed, from the tiny Red Top seed to the large Indian corn, that it does not clean, grade and separate perfectly.

It has a bagging attachment which does away with the work of one man.

Handles 70 kinds of Seed Grain and Grass Seed.

From Wheat, it takes Wild Oats, Tame Oats, Cockle, Rye and Smut.

Cleans the dirtiest Flax. Has special knocker and skimmer

which prevents clogging. (Other machines choke up.)

Takes Dodder, Barn Yard Grass and Foxtail out of Alfalfa and Millet "slick as a whistle.

Takes Buckhorn from Clover.

Handles Peas as well as any Grain or Grass Seed. Removes foul weed seed and all shrunken, cracked and sickly grains. Takes out all dirt, dust and chaff. It is also a bully chaffer. Handles 60 bushels per hour. Gas power or hand power. Easiest running mill.

Price, with Bagger, \$37.00.

ABC Community Vacuum Washer

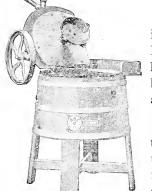
The COMMUNITY VACUUM WASHER is the only washing machine made that has a tub of Port Orford Cedar. This is in the natural wood finish, highly varnished. Interior of tub is corrugated, and has a perfect water-proofed finish.

Diameter of tub, 22 inches at top; 25 inches at bottom; 13½ inches deep. Height of entire washer, 30 inches.

The COMMUNITY VACUUM WASHER is the easiest-running Hand-Power Washing Machine on the market. Very easy to move around—will go through any door. And absolutely noiseless because it is ball-bearing throughout.

Has a capacity of 8 to 10 shirts at a time. Washes a tubful of clothes in 10 to 12 minutes. Saves work, worry, backaches and

sore spots. Saves the expense of the weekly washerwoman.



All moving parts are enclosed—absolutely nothing to tear or injure clothes. A place to attach any kind of wringer is provided. Every oiling hole is easy to get at. All mechanism is held fast by heavy bolts, not serews (which come loose and fall out.) Heavy iron bands around tub to reinforce it. Mechanism is finished in aluminum and black.

The COMMUNITY VACUUM WASHER has the Vacuum Suetion System of cleaning clothes—a double movement. Plunger moves up and down, and also has a turning motion. This turning movement keeps the clothes in action, and thoroughly cleanses every inch

Lid Raised Showing Vacuum Dolly

The No. 2 One Minute Washer



varnish.

The improved One Minute Washer is all that can be desired in a hand power washing machine. The most modern method in machine construction has been adopted and incorporated in this washer.

Years have demonstrated that the process of stirring the clothes, or agitating them back and forth in the water by means of a dolly, which oscillates rapidly is the best method of removing the dirt.

The lever has a fulcrum on the side of the tub and in the upper end of the lever is placed a handle for the operator, and at the lower end it is attached to a double joint fastened on to a pitman, which again is fastened to a crank, that with every stroke of the lever turns

a machine cut gear-wheel. This gear-wheel is enclosed in a gear case and is imbedded in hard oil and mounted on ball bearings and in turn drives a machine cut pinion en-

closed in the same case and mounted on ball bearings.

Our Improved One Minute Washer has evolved from our old time tried machine, which is known from ocean to ocean, and the result is a machine that is a credit to mechanical skill and ingenuity, and will be a blessing in every home, and a friend to every woman who is fortunate enough to secure one.

woman who is fortunate enough to secure one.

The tub is made from selected Virginia Cedar, kiln dried and free from flaws and imperfections. It is finished in one coat of Liquid filler and two coats of high grade

Price \$11.50

No. 3 Sandusky Combination Power and Hand--Power Washer

In presenting to the public our new Sandusky Combination Power and HAND-WASHER, we feel we are filling a long felt want in the washing machine line. There has always been a good demand for a machine of this character—a machine which can be operated by an engine, or in case of necessity one which can be operated just as easily by hand-power as any ordinary hand-power machine. We have solved the problem and are now ready to offer you the above type of machine.

Here is a machine which not only fills the above requirement, but one which also is simple in construction, easy to operate, and being self-lubricating requires no attention along those lines.

The gears on this machine are all CUT GEARS, same as used on

the No. 2 and practically noiseless.

Price \$12.00

No. 4 Sandusky Power or Electric Washer



It is positive in action and safe in operating because it has covered gear drive. It is simple because it is made of very few parts and so designed that it occupies but a small space.

The tub is large and roomy, made from selected Virginia Cedar and is finished in its natural color with one coat of shellac and two coats of high grade varnish. The water is drained through bottom, so that when draining, the machine need not be tilted.

Every Power Washer is equipped with our high grade wringer

with enclosed cogs and safety release.

Every Electric Washer is equipped with same wringer and a oneeighth horsepower standard motor with cord ready to attach to lamp

socket. Legs are mounted on steel roller casters.

We cannot do this machine justice in describing or portraying with pictures; it must be seen to be appreciated.

Figure No. 1 shows the wringer in position to wring clothes from washer to rinse tub. Figure No. 2 shows wringer swung 45 degrees to wring clothes from rinse tub to blueing tub.

Figure No. 3 shows wringer swung 90 degrees to wring clothes from blueing tub to basket. Figure No. 4 shows flat pulley to be used for gasoline engine drive.

Figure No. 5 shows electric motor adjusted underneath tub.

Prices

The A. B. C. Power Washer and Wringer



The A. B. C. Power Washer and Wringer is made in two styles and sizes. The No. 11 and No. 12 have the 4 post Wood Type Dolly. The No. 101 and No. 102 have galvanized Vacuum Type Dolly. Number 11 and No. 101 are long enough for one rinse tub and extension for basket as shown in illustration at the left. Number 12 and No. 102 are long enough for two rinse tubs and extension for basket as shown in illustration below.

Everything for these washers are included, except the rinse tubs, clothes basket and the belt running to your power plant.

The A. B. C. Power Wringer is the very latest pattern. It has Frictionless Bearings, 11-inch Rolls and Reversible Drain Board, which is attached to upright frame and slides along the wash stand, and wrings wherever placed from either wash tub or rinse tubs. This wringer can be operated independently in either direction, or

at the same time that the wash tub is working and by same power.

The platform is made of steel. There are no gears, chains, or cog wheels either on washer or wringer, that are exposed. The A. B. C. washer can be operated with a gas engine, electric motor, or by hand.

The A. B. C. Washer and Wringer is fully guaranteed to do successful work or no sale. You are under no obligation if it fails to do the work for which it is intended. Has an adjustment for regulating the height of platform from floor.

MODEL 102

"The Power Does
All the Work. I
Merely Superintend
the Job."

Made also
for One
Rinse Tub

The A. B. C. does the quickest, best, easiest and most economical work. There is no lifting or shifting of tubs, no bending over or cramped positions to assume, no red, raw hands—in fact, no physical exertion at all. The power does it right. Will last a lifetime. Cannot warp, crack, break, split or chip.

The A. B. C. Noiseless Belt Drives insure automatic stopping of wash tub or wringer if the washing should get twisted and liable to be damaged. One hand lever conveniently located, operates the Reversible Frictionless Bearing Power Wringer. Opening or closing lid of washtub controls operation of washer. Not necessary to shut off power until entire washing is completed.

The Washtub is made of selected Southern Cypress, the best wood obtainable for this purpose. The A. B. C. Power Washers are very attractively finished. The washtubs are gray, with bands trimmed in gold paint. The steel frame is battleship gray, fittings in black. Upright wringer frame and platform are in natural finish.

Special circular mailed on request.

POST HOLE DIGGERS

Standard Earth Augers

STANDARD EARTH AUGERS are "Standard" because:

They will do the most work in the shortest time with the least labor; and are made of the highest grade material.

The ONLY Auger made having movable blades, which open to discharge contents. Will dump sticky elay with ease.

Can be instantly adjusted to bore many different sized holes.

In fact, it has no equal for any kind of Earth boring.

No. 8 STANDARD EARTH AUGER

Bores SEVEN different sized holes; 8, 9, 10, 11, 12, 13 and 14 inches in diameter and 3½ feet deep. The stem can be fitted with pipe extension to bore extra deep holes or wells.

PRICE \$3.75

Universal

Cast Steel Blade of best quality, strong, durable and easily operated. Works in all kinds of soil, clay, sand, gravel, shale, etc.

PRICE \$2.00

Lock Lever

Cast Steel Blade fitted with automatic self lock which locks the blade at right angles so that both hands may be used in lifting the ground out of the hole, works equally well in any kind of soil from muck to stones.

The best implement ever put into the ground for the purpose of digging holes. It is easily operated. A boy can work with it. A trial will convince anyone that it will save its cost in a few days' use.

PRICE \$1.50

Tamping Head Steel Digger

All Steel, long and wide cutting blade with large tamping head made of one-inch round steel; length over all five feet, nine inches.

PRICE \$1.25



No. 136—Square Head, axe finish, weight 3, 4 and 5 lbs., per lb....\$0.07 No. 137—Round Head, Truckee Pattern, weight 3, 4 and 5 lbs., per lb .08



LOCK





UNIVERSAL

STAR BARB WIRE



Star Barb wire is made of No. 14 galvanized, strong steel wire, and has a breaking strength of 1,000 pounds. The barbs are short and humane.

PUT UP IN 80-ROD REELS

Two Point Hog,	Barbs about	3 in.	apart, per reel	
Two Point Cattle,	Barbs about	5 in.	apart, per reel	

Regular Barb Wire

Made from No. 12 G	alvanized Wire. W	e can furnish in different styles as follows:
80 Rod Reel, Two	Point Hog, Barbs	about 3 in. apart, per reel\$3.55
80 Rod Reel, Two	Point Cattle, Barbs	about 5 in. apart, per reel 3.45
80 Rod Reel, Four	Point Hog, Barbs	about 3 in. apart, per reel 3.95
80 Rod Reel, Four	Point Cattle, Barbs	about 5 in. apart, per reel 3.60

If preferred we can furnish above in regular reels weighing from 100 lbs. to 120 This. at \$4.30 per 100 lbs., or we can furnish it in Pony Reels weighing from 60 lbs. to 85 lbs., at \$4.35 per 100 lbs.

Galvanized Plain Wire

No. 9—Price per 100 lb. roll	34.10
No. 10—Price per 100 lb. roll	
No. 11—Price per 100 lb. roll	4.20
No. 12—Price per 100 lb. roll	4.25

Galvanized Coil Spring Wire

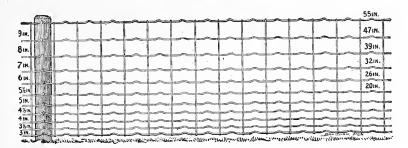
Wire Nails

8d	and	9d	${\bf Common}$	Nails,	\mathbf{per}	100	lb.	keg		5 5
10d	to	16d	${\bf Common}$	Nails,	per	100	lb.	keg	3.5	50
20d	to	60d	${\bf Common}$	Nails,	per	100	lb.	keg	3.4	45

Prices on other sizes and kinds quoted on request.

SPECIAL PRICES WILL BE QUOTED ON ANY OF THE ABOVE WIRE IN TON OR HALF TON LOTS.

"Pittsburgh Perfect" Farm Fence



- 1. Stays are Electrically Welded to the strands, forming a perfect union and an amalgamation with the strands not found in any other fence.
 - 2. All stay wires are made as heavy as intermediate line wires. A fence, like a chain, is only as strong as the lightest material in it. Think this over carefully.
 - 3. No wraps to get loose, to hold moisture and cause rust.
 - 4. No projection to injure stock or tear wool from sheep.
 - 5. Stronger at the joints than any other fence. Welded together by electricity.
 - 6. Guaranteed that the wire is not injured at the joints.
 - 7. Guaranteed adjustable to uneven ground.
 - 8. Guaranteed that stays will not separate from strands.
 - 9. Made by the most modern process and on the latest improved machinery.
 - 10. Made of tough, strong, durable Open Hearth wire, genuinely DOUBLE GALVANIZED.

"PITTSBURGH PERFECT" REGULAR FARM FENCE

Top and bottom wires No. 9. All other wires, including stays, No. 11.

No.	26726	in.	high,	7	strands	with	6	in.	stays,	per	10	rod	roll	 \$3.75
No.	399 - 39	in.	high,	9	strands	with	12	in.	stays,	per	10	\mathbf{r} od	roll	 3.80
No.	458 - 45	in.	high,	8	strands	with	12	in.	stays,	per	10	\mathbf{rod}	roll	 3.70
													roll	

"PITTSBURGH PERFECT" "JUMBO" FENCE

"Pittsburgh Perfect" "Jumbo" Fencing is the heaviest practical wire fence fabric manufactured. It is an all No. 9 wire fence, welded by electricity, which produces a complete amalgamation of the wires at the joint.

All wires including stays, No. 9.

No.	33533	in.	high,	5	strands	with	12	in.	stays,	per	10	rod	roll	\$4.05
No.	45845	in.	high,	8	strands	with	12	in.	stays,	per	10	rod	roll	5.40
No.	49949	in.	high,	9	strands	with	12	in.	stavs.	per	10	\mathbf{rod}	roll	6.05

"PITTSBURGH PERFECT" RAZORBACK HOG FENCE

The "Pittsburgh Perfect" Razorback Hog Fence fills a peculiar position in the fence field There has been a demand for a very close mesh hog fencing made of wire sufficiently large to withstand hard usage.

Spacing between strands from bottom to top, in inches: 2, 2½, 2½, 3, 4, 5, 5, 6, 6, 6, 6, Top and bottom wires No. 10 all other wires including stays, No. 12.

No	o. 309—30	in.	high,	9	strands	with	6	in.	stays,	per	10	rod	roll	\$3.80
No	. 3610—36	in.	high,	10	strands	with	6	in.	stays,	per	10	rod	${\tt roll}.\dots\dots$	4.30
No	. 3610—36	in.	high,	10	strands	with	12	in.	stays,	per	10	\mathbf{rod}	$\operatorname{roll}\dots\dots\dots$	3.30
	. 421142													2.65

STAPLES.

1	or	$1\frac{1}{4}$	in.	Galvanized,	per	lb.	 	٠.	 	 	 	 		 	 	 	. :	\$0.0	7
				Galvanized.														4.36	

Complete Catalogue showing other styles and sizes of "Pittsburgh Perfect" Fences sent on request.

Improved "Pittsburgh Perfect"

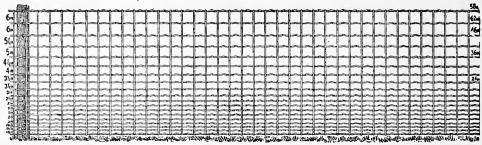
POULTRY AND GARDEN FENCE

The stays are ELECTRICALLY WELDED to strands, forming a perfect union and an amalgamation with the strands not found in any other fence.

No wraps to get loose, or hold moisture and cause rust.

Made of tough, strong, durable Open Hearth wire, genuinely DOUBLE GALVANIZED.

This is a one-piece fabric, easily erected, and does not require top and bottom boards. most effective, durable, satisfactory and best looking poultry fencing made. The



Spacings Between Strands from Bottom to Top in Inches: 1½, 1½, 1½, 2, 2, 2, 2, 2, 2½, 3, 3½, 3½, 4, 4½, 5, 5½, 6, 6.

The Improved "Pittsburgh Perfect" Poultry and Garden Fence fills every requirement of a Poultry Fence, and is amply strong and close enough to keep out or fence in the smallest Chicks, Horses, Hogs, Cattle or Dogs.

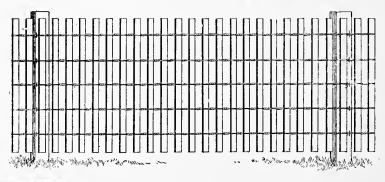
Made in Five Heights-24 inches, 36 inches, 46 inches, 52 inches and 58 inches. Has Stay or Upright Wires 6 inches apart. Is put up in 10 Rod Rolls.

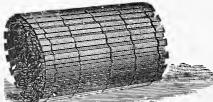
Regular Style—Top and Bottom Wire No. 10, all the other wires No. 13. Special Style-Top and Bottom Wire No. 11, all the other wires No. 14.

PRICES—PER 10 ROD ROLL.	Regular Style.	Special Sty
No. 2412—24 inches high—12 Strands	\$4.00	\$3.30
No. 3615—36 inches high—15 Strands		4.20
No. 4617—46 inches high—17 Strands	5.85	4.65
No. 5218—52 inches high—18 Strands		5.00
No. 5819—58 inches high—19 Strands	6.70	5.40

Staples for above, 10c per lb. THERE IS NO OTHER FENCE ON THE MARKET that is put together like it is. The stay and strand wires are welded together by electricity; they cannot be melted, burned or rusted apart—the joint is stronger than the wire itself.

Combination Picket Fence





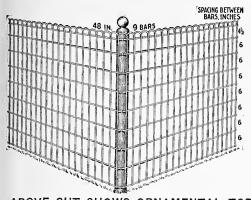
This popular fence for Gardens, Yards, Vacant Lots, etc., is made of good oak pickets 11/2 inches wide, 1/2 inch thick and 4 feet long, woven together with five cables of No. 12 galvanized wire. No rail is required. We make this fence to order in the following size:

 2½ inch space between pickets, less than 100 feet
 \$.06½ per ft.

 100 feet and upwards
 .06 per ft.

Put up for shipment in reels, not exceeding 75 feet. Orders filled for any required number of feet at the above prices.

"PITTSBURGH PERFECT" LAWN FENC



Thousands of miles of "Pittsburgh Perfect" Lawn Fence grace the homes of the wealthy city dwellers, as well as the homes of those living in the smaller towns, villages, and on farms. It casts no shadows, and consequently flowers can be successfully grown at its base, or a lawn cultivated close along the fence line. It does not to the slightest degree obstruct the view, but allows a free vision from within or without.

The fine mesh of "Pittsburgh Perfect" Lawn Fence positively prevents fowls and small animals squeezing through, and the heavy Open Hearth wires, electrically welded at the joints, are strong enough to prevent large animals from breaking through. The fence is absolutely non-climbable.

ABOVE CUT SHOWS ORNAMENTAL TOP

Made of tough, strong, durable Open Hearth wire, genuinely DOUBLE GALVANIZED. Every Space between the line wires from top to bottom is 6 inches.

Design	Height	Lateral wires	Distance	Price per
Number	Inches	in fence	bet. stays In.	100 ft. roll
With Ornamental Top-all No. 9 WireNo. 367XX	36	7	1%	\$12.00
With Ornamental Top-all No. 9 WireNo. 489XX	48	9	$1\frac{7}{8}$	14.00
With Ornamental Top-all No. 9 WireNo. 367X	36	7	$2\frac{7}{8}$	8.50
With Ornamental Top-all No. 9 WireNo. 489X	48	9	$2\frac{7}{8}$	10.00
With Plain Top—all No. 11 Wire	36	7	1%	6.50
With Plain Top—all No. 11 WireNo. 489	48	9	1%	8.00
With Plain Top—all No. 11 WireNo. 489	48	9	$2\frac{7}{8}$	6.00

"PITTSBURGH PERFECT" GATES

The Frames of all "Pittsburgh Perfect" Gates are made of STEEL TUBING, with ELECTRICALLY WELDED JOINTS, producing a perfect ONE-PIECE CONTINUOUS FRAME of greatest strength.

Unless otherwise ordered, all gates will be covered with "Jumbo" (all No. 9 wire) Farm Fence,

with stays 6 inches apart.

For Single and Double Drive Gates covered with Lawn Fencing, add \$1.00 to net price. cannot cover with Lawn Fence gates over 50 inches high.

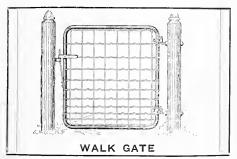
Gates furnished complete with latches and hinges for wooden posts.

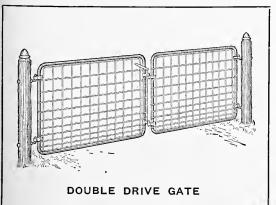
For walk Gates covered with Lawn Fencing, add 50 cents to net price. We cannot cover with Lawn Fence gates over 50 inches high. Gates furnished complete with latches and hinges for wooden posts.

WALK GATES.

Set posts 4½ inches farther apart than width of gate.

						_
Si ft.	ze in.	Approx. Weight	Prices	Size ft. in.	Approx. Weight	Prices
3x 3x 3x 4x	34 42 50 58 34 42	19 22 24 26 22 25	\$1.80 1.95 2.10 2.25 1.95 2.10	4x50 4x58 5x34 5x42 5x50 5x58	26 28 34 37 40 46	\$2.30 2.40 2.90 3.05 3.25 3.45





PRICES, SINGLE DRIVE GATES Set posts 6 inches farther apart than width of gate.

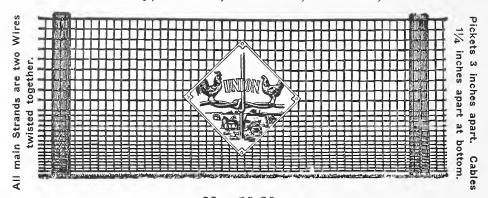
Size	Approx.		Size	Approx.	
ft. in.	Weight	Prices	ft. in.	Weight	Prices
10x34	64	\$4.15	12x50	85 *	\$5.25
10x42	69	4.40	12x58	88	5.60
10x50	75	4.70	14x34	79	5.00
10x58	77	5.00	14x42	81	5.30
12x34	73	4.60	14x50	85	5.65
12x42	77	4.90	14x58	93	6.00
	DDICEC	DALIBLE	COLVE	0 4 THO	

ES, DOUBLE DRIVE GATES Set posts 6 inches farther apart than width of gate.

Size	Approx.		Size	Approx.	•
ft. in.	Weight	Prices	ft. in.		Prices
10x34	77	\$5.80	12x34	79	\$6.20
10x42	80	6.20	12x42	85	6.60
10x50	85	6.60	12x50	96	7.05
10x58	88	7.05	12x58	99	7.55

UNION LOCK POULTRY FENCE

For Poultry, Rabbits, Orchards, Gardens, Etc.



No. 19-20

Union Lock Poultry Fence has become so well known we hardly think detailed description of it is necessary here.

The horizontal lines of this fence are all composed of 2 No. 20 wires twisted together. Beginning at the bottom, the first seven cables are 1½ inches apart, the next 6 cables are 2 inches apart and all above that are 4 inches apart. This gives a mesh of 1½x3 inches at the bottom, where it is needed for small chicks, and above two feet, where fowls can only reach when on the wing, the mesh is 3x4 inches. The pickets are No. 19 galvanized steel wires and are 3 inches apart. On account of the pickets being at right angles with the cables, this fence will fit any unevenness of the ground without cutting.

No. 17 EXTRA HEAVY

We also make this fence of No. 17 wire throughout, with the same spacing between cables, but the pickets are 4 inches apart. This fence is heavy enough to turn all stock, and makes an ideal fence for gardens, orchards, etc.

					PRICES				
	Pl	ER RO	LL			No. 19-20.	No. :	l7 Extra	Heavy.
1	65 fe	t long	g, 1½	feet	high	\$2.40			
1	65 fe	t long	s, 2	feet	high	2.70			
1	65 fe	et long	g, 3	feet	high			5.00	
1	6 5 fe	et long	g, 4	feet	high	4.00		6.00	
					Staples for fastening above, 10c per	· lb.			

In comparing above prices with ordinary poultry netting remember that these rolls are 15 feet longer.

Ask for special prices on orders of 10 rolls and upwards.

DIAMOND MESH POULTRY NETTING

The stock we offer is the "Silver Finish" Brand, galvanized after weaving, guaranteed to be perfect in every respect. Each roll contains 150 lineal feet.

PRICES

2-INCH MESH, NO. 20 WIRE	1-INCH MESH, NO. 20 WIRE.
Per roll of 150 lineal feet.	Per roll of 150 lineal feet.
1 foot wide\$1.00	1 foot wide\$2.35
1½ feet wide 1.55	1½ feet wide
2 feet wide 2.00	2 feet wide 4.65
$2\frac{1}{2}$ feet wide	2½ feet wide 5.50
3 feet wide 3.00	3 feet wide 6.60
4 feet wide 4.00	4 feet wide 8.55
5 feet wide 4.95	Staples, 10c per lb.
6 feet wide 5.50	

"PITTSBURGH PERFECT" FENCE TOOL

The "Pittsburgh Perfect" Fence Tool here illustrated is without doubt the most useful fence tool on the market.

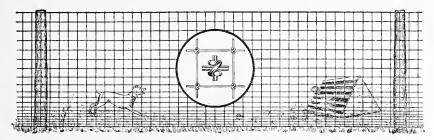
It combines hammer, wire cutter, staple and nail puller and splicing tongs.

Price \$1.00. Postpaid \$1.10.



Blue Ribbon Poultry Fence

Top and Bottom Wires No. 15. All Other Wires Including Stays No. 17.



STANDARD SPACING.

Strength-Durability-Protection-Beauty-Economy-Ease of Handling

These are the features of the ideal poultry fence sought for by all buyers. In fact these are practically all the good points any fence user could wish for, and make Blue Ribbon truly a "blue ribbon" poultry fence.

The ease of handling Blue Ribbon Fence is a joy to the average busy man-be he farmer or poultryman. With well braced end posts the entire length of the fence is stretched at one operation—is easily nailed to the posts, and the job is done. No top railing or bottom board is necessary—no laborious stretching between posts—no baggy, ungainly fence after all is completed.

The strength of Blue Ribbon Poultry Fence is established by its heavy wires just twice the size of the wires used in ordinary two-inch poultry netting—also by its superior weave. Everything considered—material, labor, and wire, Blue Ribbon Fence costs only one-half the cost of netting and lasts several times as long.

The one-piece stay (up and down wire) gives the fence greater rigidity-makes it self-supporting without the top rail and bottom board used in netting. The famous Square Deal knot never slips.

Protection to growing chicks is only obtained by a strong, well stretched fence with line wires close enough together so the chicks cannot possibly crawl out and stray away. Blue Ribbon line wires at the bottom of the fence are only one inch apart.

The first four spaces of Standard Blue Ribbon Fence between strand wires, commencing at the bottom, are 1 in., then $1\frac{1}{8}$ in., $1\frac{1}{4}$ in., $1\frac{1}{2}$ in., $1\frac{3}{4}$ in., 2 in., $2\frac{1}{4}$ in., $2\frac{3}{4}$ in., $3\frac{3}{8}$ in., and above this 4 in. The stay wires (up and down wires) are only 4 inches apart.

Prices per Ten-Rod Roll—Standard Spacing.

No. 1424—24 inches high, No. 2048—48 inches high,	· · · · · · · · · · · · · · · · · · ·	high, 17 strands\$3.60 high, 23 strands 5.00

No. 2672-72 inches high, 26 strands.. 5.75

Extra Close Spacing.

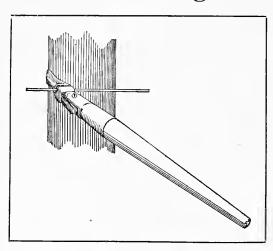
This fence is also built extra close between line wires, and 4 inches between uprights. The first five spaces at bottom of fence, upward, are 1 in., then $1\frac{1}{8}$ in., $1\frac{1}{8}$ in., $1\frac{1}{8}$ in., $1\frac{1}{2}$ in., $1\frac{1}{8}$ in., $1\frac{1}{8}$ in., $1\frac{1}{8}$ in., $2\frac{1}{8}$ in. and above this $3\frac{1}{8}$ in. Note the two extra bars and five one-inch spaces at the bottom in the extra close style fence.

Prices per Ten-Rod Roll-Extra Close Spacing. No. 1625—25 inches high, 16 strands......\$3.00 No. 2248—48 inches high, 22 strands...... 4.50 No. 2560—60 inches high, 25 strands...... 5.25 No. 2872—72 inches high, 28 strands...... 6.00 Little Giant Wire Stretcher

The Little Giant Wire Stretcher is the best crank stretcher made. It is constructed entirely of malleable iron. Finished in aluminum bronze.

Price \$1.00. Postpaid \$1.10.

"Pittsburgh Perfect" Smooth Grip Single Wire Stretcher



Has perfectly smooth curved jaws; Has no teeth to cut nor injure the wire; Has a positive grlp—cannot slip.

Has double jaws opening and shutting automatic-

ally;
Wire can be put in on either side, one side for large wire the other for small, and with this stretcher you can go right around the post with the wire.

Made of malleable iron with hickory handle.

ABSOLUTELY THE BEST SINGLE WIRE STRETCHER IN THE WORLD.

It is just what you want for stretching barbed and plain wire.

Price, complete with wood handle, 75c.

Postpaid, 90c.

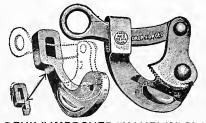


FENCE TOOLS

No. 1900

Postpaid

Genuine Fence Tool. Drives staples; pulls staples; cuts wire; saves time\$1.00 \$1.10



"RED DEVIL" IMPROVED "HAVEN'S" CLAMP

No. 566

Postpaid

Improved Haven Clamp; made from a forging, very simple, strong and durable; the best clamp for barb or smooth wire.

Takes No. 8 wire and smaller \$1.50 \$1.55



COM	DINI	ATION	DI 10	-DC

		P	ostpaid
No. 1000	6 "	\$0.40	\$0.45
High Grade Gun Metal	10"	.75	.80
Fence Plier	12''	.85	.90



No.	925
H	eavy

Heavy Combination Slip



STANDARD SIDE CUTTING PLIER

	P	ostpaid
4''	\$0.50	\$0.55
5 "	.60	.65
7"	.85	.90
8"	.95	1.00
	5" 7"	4" \$0.50 5" .60 7" .85



No. 024

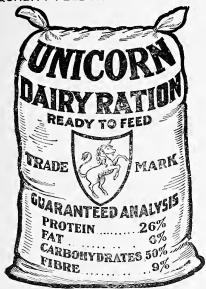
Postpaid

Genuine Red Devil Glass Cutters \$0.10 \$0,15

STOCK FEEDS

Unicorn Dairy Ration | Otto Weiss Stock Feed

A QUALITY FEED AT THE RIGHT PRICE



What It Is

A complete grain ration suitable for any kind or breed of dairy cow.

2. A high protein feed with an exact digestible analysis. Can be mixed with corn, oats or hominy.

Its Ingredients

Ajax Flakes, a coarse flaky corn grains analyzing from 30 to 39% protein and 11 to 17% fat. Flaky Coarse Corn gluten feed analyzing from 20 to 30% protein and 2% fat. Extra choice cottonseed meal analyzing from 40 to 45%protein and 7 to 11% fat. These are the chief ingredients. It also contains coarse (white corn) hominy feed, coarse barley malt sprouts, coarse barley brewers grains and very small amounts of wheat bran. Purity

It is the only absolutely pure high-grade ration made in the U. S. today. Used by nearly all Experiment Stations and Colleges.

Why It is Cheap

Because it is so strong, 6 lbs. of UNICORN will do the work of 8 or 10 lbs. of other feeds.

Because—it increases the cow's yield of milk and butter.

Its Crude Analysis

26% Protein (80% digestible)

6% Fat (average)

9% Fibre (nearly all digestible)

50% Carbohydrates

Digestible Analysis

As reported by the Mass. Experiment Station, 21% digestible protein; 75% total digestible food, the highest of any ration ever actually tested by any station.

90 lbs. of Unicorn is equal to 100 lbs. of any ready ration of \$3.00 per ton greater value.

In this feed you combine the necessary things which make the most milk at the least cost.

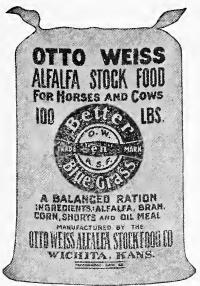
It is palatable, bulky, rich in protein and highly digestible. Unicorn possesses all those qualities that make a commercially successful ration.

We make a specialty of supplying our customers with high grade Stock Feeds of which the following is a list:

Buffalo Gluten Feed Diamond Gluten Meal Digester Tankage Oil Meal—Old Process Cotton Seed Meal

Flaxseed Meal Retsof Rock Salt Alfalfa Meal Ajax Flakes Dried Beet Pulp

FOR TEN YEARS THE STANDARD BY WHICH OTHER FEEDS HAVE BEEN MADE



The fact that "it sticks to the ribs" and keeps stock in perfect condition, is the strongest recommendation we can give.

As a horse feed it has no equal. They like it better every time they eat it and for dairy feeding, Otto Weiss Stock Feed is above reproach. It's a milk producer from the word go--and neat profits are always assured whenever and wherever it is used.

ALFALFA-Sound, sweet and the whole plant properly ground; CORN—Pure yellow and the best we can buy; OATS—No. 3 or better, crushed so the inside kernel is exposed; WHEAT BRAN—Of the highest quality and ¾ of 1% salt—are the ingredients that insure Otto Weiss Stock Feed to be a feed of the highest possible merit.

It is a well-proportioned, thoroughly mixed ration and always ready for the feed box—winter or summer.

It only requires two-thirds as much in weight of the Otto Weiss Stock Feed as it does in corn chop to give a horse or a cow the required nourishment, and it will keep them in far better condition.

Lactola Dairy Feed

Lactola Dairy Feed is made out of pure, wholesome feeds and is a close imitation of the oat kernel. It contains no more oat-hulls than are found in natural oats and the oat groat is replaced by by-product feeds containing more protein and fully as much energy producing material. This makes Lactola Dairy Feed a perfect substitute for oats. It is the only feed of its kind on the market and we can easily prove it to be far more valuable than any other molasses feed sold. It is sweet and palatable, does not leave a bitter taste and will please the cows because it is made of sound, wholesome feeds.

Lactola Dairy Feeds furnishes digestible nutrients at as low a cost per pound as any dairy feed excepting only Unicorn Dairy Ration. It can either be fed alone or used to replace oats, bran and mill feed.

BLATCHFORD'S CALF MEAL

THE PERFECT MILK SUBSTITUTE.

Will raise or veal calves at from one-third to onequarter the expense of feeding milk. Raises better calves and saves the milk. You can't afford not to use it. Used and indorsed by experimental stations and farmers all over the world. It is absolutely the only milk substitute that contains all the elements necessary for bodily growth in the correct proportions. Pushes pigs, colts, lambs, etc., forward better and quicker than any other food. Prevents scouring.

100 Pounds Makes 100 Gallons of Perfect Milk Substitute.

PRICES.

				Postpaid
25	lb.	bag	\$1.10	\$1.45
50	lb.	bag	2.10	
100	1b.	bag	3.75	

BLATCHFORD'S PIG MEAL

(The Perfect Milk Substitute for Young Pigs)

easily takes care of the weaning stage—the time when those little fellows need good care and the proper gruel to tide them over from the mother milk to coarser grain feed. Blatchford's Pig Meal is inexpensive, and a pound makes a gallon of gruel.

PRICES.

			Postpaid
25	lb.	bag\$1.10	\$1.45
50	lb.	bag 2.10	
100	lb.	bag 3.75	
		Write for special circular.	

DARLING'S 60% PROTEIN DIGESTER TANKAGE

Darling's Digester Tankage builds bone and muscle on young pigs, and matures a hog for market from two to three months earlier than corn alone.

Hogs that are fed with it are better proportioned—more lean and less fat. They are sound, and ship well with surprisingly small shrinkage.

Price per 100 lb. bag.....\$3.30 Write for prices on larger quantities.

CONKEY'S HOOF REMEDY

The hoof is more than half the horse. Keep the feet in good shape and the main foundation to usefulness and profit is assured.

It is a sure preventive for Split Hoof, Quarter Crack, Seedy Toe, Contracted Heel, and hard, dry feet.

PRICES.

		Postpaid.
1	pint\$0.50	\$0.60
1	quart	.85
2	quarts 1.25	1.35
1	gallon 2.00	

CORONA HORN PREVENTIVE

For applying to horn nubbins or calves before 10 days old.

-					
$\frac{1}{2}$	oz.	Bottle	\$0.50	Postpaid	\$0.55
1	oz.	Bottle	1.00	Postpaid	1.05

CORONA WOOL FAT

Is extracted from the wool of the sheep and does not differ from the secretions in the skin of the horse.

It will positively cure Scratches, swollen tendons, relieve inflammation, and will grow a new and perfect hoof.

PRICES.

			•	Postpaid
4	OZ.	box	\$0.25	\$ 0. 30
12	oz.	р́ох		.55
32	oz.	box	1.00	1.10

KOW KURE

THE GREAT COW MEDICINE

For Abortion, Barrenness, Scouring, Bunches on the Udder, Red Water and "Off Feed." Kow-Kure assists nature, makes pure blood, corrects stomach disorders, improves appetite, and being a safe and powerful tonic makes a larger flow of milk.

			Postpai
Small	size	\$0.50	\$0.60
Large	size	1.00	1:10

COWS' RELIEF

Cows' Relief is one of the greatest remedies ever compounded for cattle.

It is the original specific for all troubles of the bag and teats.

Cows' Relief is worth its weight in gold to the farmer or dairyman, as it is a specific remedy for all bag and teat troubles.

It removes the soreness and swelling that is frequently a cause of kickers and hard milkers.

PRICES.

		Postpaid
Small size	\$0.50	\$0 .5 5
Large size	1. 0 0	1.10

COW-TONE

Is a preventive of abortion and barrenness. It will prevent milk-fever, retained afterbirth, tuberculosis, and all similar troubles.

	Postpaid
Medium size\$0.50	\$0.6 0
Large size 1.00	1.10

BAG BALM

We recommend BAG BALM for all diseases of udder and teats; Caked Bag, Sore Teats, Bunches, Chapping, Cuts, Inflammation, etc. It makes easy milkers of hard ones, keeps all the parts in a sanitary, healthful condition.

Price\$0.50. Postpaid \$0.60

CALVES' CORDIAL

Is one of the best remedies ever prepared for the treatment of scours in calves and cows, also a valuable remedy for stomach and bowel disorders. It acts as an astringent upon the digestive tract, soothing the inflamed tissues and removing the fevered condition.

Large size50c Postpaid 55c



DISINFECTANT

(NOT A POISON)

FOR LIVESTOCK-POULTRY-BARNS

B-K stand in a class by itself as a powerful safe, inexpensive farm disinfectant and antiseptic. It has all the strength necessary to kill germs and protect animals against diseases.

B-K is a sodium hypochlorite disinfectant and has over ten times the germ-killing strength of

carbolic acid.

It contains no acid, oil, coal-tar or color.

It is used by the leading breeders and dairymen.

B-K was awarded blue ribbon and gold medal at the Panama Exposition.

Reasons Why B-K Is Protection Against Animal Diseases

Powerful Germ Killer. Tested by the U.S. Hygienic Laboratory Method of testing disinfectants, B-K is possessed of many times the germ-killing strength of most disinfectants ordinarily used. It has ten times the germ-killing power of undiluted carbolic acid; also many times that of the ordinary coal-tar dips, such as cresol and the various combinations of cresylic acids, most of which are poisons and are irritating.

Safe for Internal Use. B-K contains no poison, acid, oil-may be safely used internally according to directions. B-K is fed in the drinking tank. Makes prevention of disease much more effective.

B-K Ideal for Vaginal and Uterine Injection. vagina and uterus contain quantities of mucus and slime of the nature of albumin. Germs develop and thrive in this albuminous matter. B-K promptly dissolves all this matter, gets right at the germs, destroys and dissolves them; also dissolves and removes any diseased tissues with which it comes in contact, leaving the living tissues clean and inducing prompt healing of lacerations. It does not cause straining.

Clean to Use. B-K is clean as water, is an active cleanser, keeps hair and skin of animals clean and bright removes stains from the hair, is cleansing and beneficial for the hands of workmen, healing and soothing to the flesh.

Leaves no Odor After Use. B-K purifies the air and all surroundings-destroys odors, leaves everything fresh and inviting.

B-K is Cheap to Use. One gallon of B-K makes from 128 to 256 gallons of dilution for disinfecting and douching cows.

CONTAGIOUS ABORTION.

CONTAGIOUS ABORTION.

Contagious Abortion is being success fully controlled in many herds by following our simple plan with B-K. One man writes: "I have been using B-K according to directions, and the results have been very gratifying. My cows have every one passed the time for aborting and are calving all right in a natural way. I had lost \$1500.00 on my cows and feel that B-K has cleaned up the trouble entirely."

If interested in Abortion, ask for bulletin No. 52, "Abortion—Prevention and Control."

Retained After birth

Retained After-birth.

Leading breeders throughout the country bear ample testimony to the valuable aid they have received in using B-K in treating retained after-births and similar ailments among their cows. One breeder says, "I have found B-K the greatest thing ever for cows that do not clean readily. This is a job I have always had to do by hand, but now, by injecting B-K dilution, never knew it to fail to bring all things right before the fourth day."

Sterility.

B-K is so effective in overcoming the germ infection of the reproductive tract which causes sterility or barrenness that no cow or heifer should be sold to the butcher as barren before she has been given the theory B-K treatment. been given the thorough B-K treatment.

Calf Scours.

A well-known breeder of registered

A well-known breeder of registered stock says:
"My experience proves B-K a wonderful remedy for calf scours. I had 33 with it at one time, some too weak to stand, and by use of B-K for three weeks, I saved them all. At the end of that time all trace of scours was gone from the entire herd."

White was for more evidence from

Write us for more evidence from users, and for our bulletin No. 136, "How to Save Every Calf."

For Cattle. Use B-K for all disinfecting and for treatment of Abortion, Retained After-birth, After Calving, Sterility, Calf Scours, Ringworm, Cuts and Sores, Thrush, Pinkeye and Scab.

Four Poultry. Use B-K for disinfecting coops, incubators and brooders and for cases of Roup, Canker, Catarrh, Lice and Nits. Deodorizes foul-smelling coops.



PRICES.

Quart Farm Package.....\$1.00 Single Gallons 2.00 Five Gallons 9.00

Send for These FREE Books.

Bulletin 11 "General Disinfecting."

"B-K on the Farm." 237 147 "Hog Sanitation."

" "Contagious Abortion." 52

"Calf Scours." 136 "Good News for Poultry Raisers." 213

Awarded Gold Medal Panama Pac. Expo. (See also page 134)



Pratts,

Animal Regulator and

Remedies



More work out of your horses, more milk from your cows, fatter hogs—these are a few of the bene-fits which will come from using

Pratts Animal Regulator

Always sold on a guarantee that it will satisfy or money back. 25-pound pails, \$3.00; 12-pound pails \$1.75 postpaid \$1.95, are popular with our customers. Packages at \$1.00, postpaid \$1.20; 50c, postpaid \$60c, and 25c. postpaid \$1.20; 50c, postpaid 60c, and 25c, postpaid 30c. Get prices on 50-lb. and 100-lb. sacks.





Pratts. Heave Cough Remedy

Heave and cold Remedy

Is a positive remedy for heaves, coughs, colds and catarrh. A single day's treatment helps the worst case of heaves. Several doses show a vast improvement, and in a few days the cough will stop and the breathing be natural. It tones up the lungs and digestive organs, strengthens and soothes the nerves, and purifies the blood.

It cures coughs and colds by strengthening the digestive and respiratory organs, loosens the phlegm in the throat and counteracts the inflammation and irritation. A "heavy" horse is worthless. Pratts Heave Cure makes him valuable. Sold in 50c, postpaid 60c, and \$1.00 packages, postpaid \$1.10.

Pratts, Veterinary Colic Remedy

It is a positive remedy in all cases of flatulent colic (sometimes called bloat), spasmodic colic, gas colic, kidney colic; and acute indigestion. Its action is quick, and a cure certain.

Extra large bottle, \$1.00, postpaid, \$1.10: small size, 50c, postpaid, 55c.



pratts, Distemper and Pink Eye Remedy

goes direct to the cause of the disease, purifies the blood, prevents weakening of the internal organs caused by impure blood or poisoned by absorbing the impure matter from the abscesses.

Free from poisons; works quickly, and differs entirely from so-called "distemper cures," which so often leave the horse with a cough, heaves, eruptions, etc. Pratts Cure cures and leaves no bad aftereffects. effects. 50c a bottle, postpaid 55c.

pratts Dip and Disinfectant

has received the U. S. Government rating for sheep scab (1 part Dip to 70 parts water). Cures sheep of ticks, foot-rot and other diseases; cures cattle of mange, ringworm, scabies, ticks, screw worms, warbles, etc.; cures horses of mange, ticks, lice, ringworm, thrush, galls, sores, cuts, wounds, etc.; cures hogs of cholera, mange, lice, eczema, fly and maggots; cures dogs of fleas, lice, mange, cuts, ulcers, etc. Half gallon, 60c, postpaid 70c; \$1.00 per gallon. Are you paying more for an inferior Dip?

Pratts, Worm Powder

Specially prepared for destruction of worms in horses, cows, hogs and sheep. Purely vegetable, has a strong tonic effect that builds up and helps the animal to regain strength. Unquestionably the quickest, surest and most thorough worm destroyer pro-curable. 50 cents, postpaid 60 cents, and \$1.00, postpaid \$1.10.



Pratts

Pratts. Healing Powder

Sores, cuts, wounds, scratches, burns, scalds, barb wire cuts as well as skin eruptions, eczema and itching are quickly cured. Corns, harness and saddle galls disappear in short order. You should have this in the house or in the stable at all times.

25c, postpaid 30c

Pratts. Healing Ointment

Injuries of any kind are healed naturally and permanently, and quickly relieved by applying and pain

50c, postpaid 55e, and 25c, postpaid 30c





Pratts. Liniment (For Man or Beast)

acts both as a counter-irritant, drawing out the inflammation, and also as a penetrant. Can be used either to blister or without blistering, by regulating the application.

Cures rheumatism, lameness, sprains, bruises, contracted muscles, shoulder or stiffe lameness, thrush or canker, cockle joints, sweeny, kicks, sore throat, quinsy, curb, splint, capped hocks, shoe boils, pneumonia and inflammation of the lungs.

Sold in 25c, postpaid 30c; 50c, postpaid 60c, and \$1.00, postpaid \$1.10 bottles.

There is a Pratts Remedy for nearly every curable stock disease—guaranteed to satisfy or your money back

"SHO-FLY" THE ANIMALS' FRIEND

No Flies, Warbles, Mosquitoes, Buffalo Gnats, Ticks or Vermin on Horse or Cow. And One-third More Milk Where "Shoo-Fly" is Sprayed.

"Shoo-Fly" is an Insecticide, Germicide, Antiseptic and Disinfectant, being a Liquid Compound (free of water or gummy substances) absolutely harmless to man or beast. Exceedingly obnoxious to Flies and Insect-pests. Not objectionable to man, Cures all Sores from bottom, without much scab. Kills all Lice and Mites in Poultry house or wherever sprayed. Thousands of Testimonials.

Price, quart cans, 35c, postpaid 45c; per gallon \$1.00; 5 gallons, one can, \$4,50.

Conkey's Fly Knocker Chases the Fly

Every stockman, every dairyman needs Fly Knocker. Don't let flies torment your horses; don't let them worry your cows.

Cows give more milk and butterfat, horses work easier when you save their energy by keeping off those winged pests.

Prices-1 qt. 35c, postpaid 45c; 2 qt. 60c, postpaid 70c; 1 gal. \$1.00; 5 gal. (jacketed) \$4.00.



It stimulates the appetite and aids digestion. It is a powerful tonic and blood builder. It absorbs noxious gases in the stomach and bowels, thus rendering these organs fit to perform their natural functions. It kills worms in the stomach and intestines and prevents parasitic infection.

Use it as a preventative and your stock will remain healthy.

PRICES.

]	Postpaid
10 lb. (half peck) measure	\$0.75	\$0.9 5
20 lb. (peck) measure	1.25	1.55
40 lb. (half bushel) measure	2.25	2.75
100 lb. keg	5.00	
Special prices for larger quantiti	les.	

SALT-EM

Salt-Em helps keep your horses, cattle, sheep and hogs free from worms. Leave Salt-Em before them all the time. It's a good salt preparation that acts as a general regulator. It improves digestion and gives stock more nourishment from the same amount of food.

It strengthens overworked organs and puts the stock in better physical condition. Every stock owner should help his stock with Salt-Em. It pays. Send for free Salt-Em book on keeping animals healthy.

	Po	stpaid		Pe	ostpaid
10	lbs\$0.75	\$0.95	40	lbs\$2.25	\$2.75
20	lbs 1.25	1.55	100	lbs 5.00	

Dillon's Utility Salt

Dillon's Utility Stock Salt prevents disease—because it is a powerful antiseptic and cures indigestion.

Dillon's Utility Stock Salt is not only a worm destroyer, but a tonic and conditioner.

Many ailments of the horse are caused by undigested food in the stomach and bowels. These diseases can be cured and prevented by using Dillon's Utility Stock Salt,

PRICES.

			Postpaid
6	lb.	can\$.50	\$.65
45	lb.	pail 3.50	4.00
300	lb.	barrel 18.00	

Diamond Crystal Stock Salt

Is formed by pressure into salt briquettes about the shape of a short length of stove pipe, 5 inches long, with a one-and-three-quarter inch hole through the center.

These briquettes are fastened anywhere in the stable, or on any post or tree in the pasture, by means of a simple, durable holder. Or they may be hung on a peg.

Each briquette weighs approximately 5 lbs.

The price is 10c each; postpaid 20c. The price of the holder is 15c each; postpaid 20c.

THIS IS A RAT MUMMIFIED



It is not an experiment. On the contrary, it is a thoroughly tried and proven destroyer of Rats and Mice.

Its action on Rats and Mice is a rather peculiar one. Almost immediately after eating it they become stupefied, and they remain in this stupor until they die. Death occurs about ten hours after they have eaten the Rat Corn.

EVERY RAT THAT EATS RAT CORN MUST DIE.

Almost as soon as the animal dies, it becomes hard and dry-much like leather-and no matter how long he stays there will be No Odor.

PRICE, POSTPAID.

Per Can, 15c, 25c, 50c and \$1.00.

WYANDOTTE, Cleaner and Cleanser

Wyandotte Dairyman's Cleaner and Cleanser is used in all dairy countries of the world; and in United States and Canada 85 per cent. of the butter and cheese makers use it daily. To this large number can be added the thousands of farmers, dairymen and milk dealers who are steady patrons.

It contains no soapy grease, makes no soapy suds, nor resembles soap agents in any way. It is a sanitary cleaner made purposely to do the work of cleaning milk utensils and containers.

PRICES

5	lb.	sack\$0.40	Postpaid	\$0.50
25	lb.	sack 1.50	Postpaid	\$1.85
80	lb.	keg (bulk) 4.00		
280	1h	harrol (hulk)		

SOLON STEEL BOILER



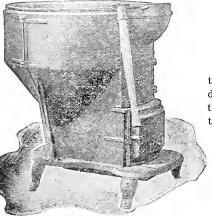
SOLON STEEL BOILER

This furnace and Caldron is designed to meet the wants of farmers, butchers, contractors and others who want something good, as well as low priced. It is, nevertheless, a good practical apparatus. It is supplied with our regular caldrons, which are unrivaled for fine finish and durability. The jacket or shell is made from heavy sheet steel, with edges banded, and has no bottom, as the stove is intended to be used on the earth, or to be filled with brick or clay up to the bottom of the feed door. It is provided with double doors so that it can be conveniently used as a coal burner when supplied with coal fixtures.

Three sizes, heavy steel shells. large double doors, Sperry's Perfect Caldrons. Capacity guaranteed. Don't confound this boiler with those of similar construction made from stove-pipe metal.

PRICES

	with wood with coal
	fixtures. fixtures.
No. 1—25 gallons; weight 165 lb	s\$10.80 \$14.00
No. 2-33 gallons; weight 190 lb	s 12.60 15.75
No. 3-40 gallons; weight 225 lb	s 13.50 16.65



THE PROFIT FARM BOILER

The Profit Farm Boiler

It is a simple furnace, with a caldron which dumps. The contents can be emptied in one minute, doing away with the slow and disagreeable task of dipping it out. It is thoroughly constructed of the best cast iron. The kettle is cast very smooth and has an extra thick bottom.

PRICES

No.	25 - 25	gallons;	weight	275	lbs.—for	wood	\$20.75
No.	250 25	gallons;	weight	275	lbsfor	coal	20.75
No.	48-48	gallons;	weight	410	$lbs.{} for \\$	wood	30.50
No.	480-48	gallons;	weight	410	lbs.—for	coal	30.50

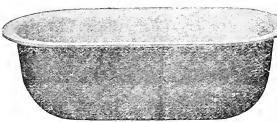


Sugar or Wash Kettles Our Sugar Kettles are full measure with Bails mill

Our Sugar Kettles are full measure, with Bails, milled and painted, holding the exact amount they are rated. Many sugar kettles and caldrons are sold by copying our list and giving fictitious measurements. When you compare prices, see that the capacity is as represented.

Actual					Us	sual		
Measure		Inside Di	mens	ions	Ra	ting	Wt.	Prices
10½ gals.,	18"	diameter,	12''	deep,	13	gals.	32	\$2.25
15 gals.,	$20\frac{1}{4}''$	diameter,	$13\frac{1}{2}''$	deep,	18	gals.	40	2.80
18 ¹ / ₄ gals.,	22"	diameter,	13월"	deep,	20	gals.	56	3.60
21_{2}^{1} gals.,	23''	diameter,	144"	deep,	25	gals.	60	4.00

HOG SCALDER



HOG SCALDER

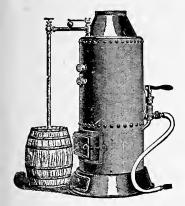
This scalder is all cast iron, very heavy, making it practical for the farmer or butcher; made in two sizes.

Inside Dimensions
No. 2—4 feet 10 inches long, 2 feet 2 inches
wide, by 18 inches deep; 85 gallons; 275
pounds\$20.00

We allow freight charges to your railroad station on any of the above when shipped direct from factory PRICES ON LARGER SIZES QUOTED ON REQUEST

Clark's Improved Feed Cooker and Water Heater

The Illustration represents our Steam Feed Cooker, or Agricultural Boiler, and we believe it to be the best Cooker ever placed on the market. It is made in the most substantial and workmanlike manner. The material used in its construction is the best boiler plate steel, 60,000 pounds tensile strength, hand riveted, tested to 100 pounds hydrostatic pressure, securing perfect safety and ample capacity to users. The fire door is of ample size, and the grate so designed that any kind of fuel may be used. The boiler is of tubular type, the flues passing through the water, giving unusually large heating surface, and as durable and efficient as any engine boiler of same dimensions.



SIZES AND PRICES.

Size No.	Diameter of Shell.	Height of Shell	Number 2-inch Flues.	Length of Boiler	Shipping Weight.	Price.
1	19 inches	40 inches	9	54 inches	360 lbs.	\$40.00
2	19 inches	44 inches	13	58 inches	430 lbs.	45.00
3	19 inches	44 inches	13	58 inches	450 lbs.	60.00

The following fittings and trimmings are furnished with each cooker: One Safety-Valve, Two Gauge Cocks, One Pump, Two Valves, sufficient pipe connections, two feet of hose, and Steam and Water Gauges. It is fitted with connections for one tank or barrel, but may be used with two or three, with additional pipe and fittings. The No. 3 has a water lined fire box.

THE KEYSTONE DEHORNERS

THE REGULAR KEYSTONE

The Regular Keystone is built along different lines from the average knife. The clipper is formed of two V-shaped knives, which, in the process of dehorning, come together and give four cutting surfaces. When the handles are pulled together, the horn is cut into in four different places, making a clean, shear job. Blades have an expansion of five inches, and the total length of the instrument is three feet.

The Regular Keystone is widely used, has received many medals and is recommended by stockmen and veterinaries everywhere.





THE IMPROVED KEYSTONE

The Improved Keystone Dehorner is the latest and most efficient dehorning knife on the market today. It has been altered and improved in several important points of construction, until its strength, cutting service and durability have been greatly increased.

The illustration shows these points. Note that the rack has been made tapering and handles have correspondingly eccentric gears. This gives the knives their greatest cutting power at the beginning of the stroke, when it is needed, to drive through the hard outer coating of the horn. This feature alone makes the Keystone Improved far superior to all other dehorners.

Note also that the outer edge of the cutting knife is pointed and its surfaces are parallel to those of the cutting edge. This makes the knife stronger and less liable to crack. Other dehorners have straight knives that break easily under great strain.

The entire instrument is lighter, stronger and better proportioned than former dehorning knives. We guarantee it to be a first-class device in every way, and should any part break during the first year of use, we will furnish repairs free of charge.

Improved Keystone Dehorner, complete with leader, rope, extra set of blades and screws,
Price\$14.00 Postpaid \$14.25

SPECIAL CIRCULAR SENT ON REQUEST.

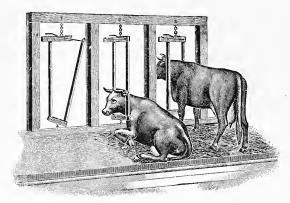
"KANT SUK" CALF AND COW WEANERS

Being made with a hinge joint, it swings out of the way when the calf eats or drinks, but effectually prevents sucking.

Heavily Tinned-Sanitary-Humane.



THE QUICK Cattle Comfort Steel Swing Stanchion



QUICK TO OPEN.

QUICK TO CLOSE.

QUICK TO PLEASE.

Made entirely of spring steel, the uprights being of smooth tubing, easy for the cows' shoulders and neck and the horizontal pieces of superior rolled angle steel driven to the tubing by strong rivets.

Hung at the top and bottom by heavy chains, which allow stanchions to swing, giving cattle perfect freedom.

Quickly adapted to old stables as they are standard size and fit the same space occupied by the rigid stanchions.

Cattle can turn their heads, lick their sides and being more comfortable, they will give more milk.

Stanchions open and close quickly with one hand only.

Will not bend or break. Always in working order.

Sanitary; not an ounce of wood to absorb odors and moisture. Keep the cows clean, as wooden stanchions do not.

PRICES.

Less than 1 dozen, each	.\$2.25
1 dozen and upward, each	
F. O. B., Pittsburgh.	
Frames, each	.\$4.50
Arched Partitions, each	. 1.50
Complete Stalls including Stanchions, Arche Partitions and all fittings necessary to se up and install	et
F. O. B. Factory.	

Special prices on large outfits quoted on request. No. 3744

Common Sense CALF FEEDER



The Common-Sense Calf-Feeder is a simple, practical device which every calf-owner will appreciate and the value of which can be seen at a glance. It was invented by a boy who possessed genius enough to figure out how he could successfully feed his calves without being obliged to sit and watch them during the process. It combines scientific principles with practical ideas, and the beauty of it is that while it is a purely mechanical device, the calf sucks his food in a natural manner, and the milk is taken into the stomach without having it form a solid, cheese-like, indigestible lump, which is frequently the case when the calf drinks directly from the pail.

PRICES.

 Postpaid

 Single Feeder
 \$2.00
 \$2.10

 Double Feeder
 3.00
 3.10

"Dandelion Brand" Butter Color

Have your butter uniform in color. In June and in January make your butter the same color. Gives butter the "high price" shade uniformly—the year round.

Practically every large creamery in the country uses DANDELION BRAND BUTTER COLOR, which proves it is kept up to the highest standard of quality

DANDELION BRAND BUTTER COLOR gives to butter that pleasing tinge of yellow which so closely resembles the natural June shade of butter, and enables the buttermaker to find a ready market at top prices.

market at top prices.

It is Purely Vegetable and meets the Full Requirements of All Food Laws, State and National.

 Small size
 Price \$0.25
 Postpaid \$0.30

 Medium size
 .50
 .60



DAIRY

THERMOMETERS

No. 3744—10-inch instrument with enlarged center which allows it to float upright. This is a distinct advantage because it makes it easy to read the temperature, mercury tube, paper scale marked same as No. 3740.

Price 50c; postpaid 60c

No. 3740—8 inch glass cylinder, mercury tube, paper scale marked "Scalding," "Cheese," "Churning" and "Freezing."

Approximate range of scale 10° to 160° F.

Price 25c; postpaid 30c



No. 3740

MILKING MACHINES HINMAN

OVER TWENTY-TWO THOUSAND SOLD



The Vacuum Tube

Milk Does Not Come in Contact With This Tube.

The Hinman Standard Milker Unit) consists of the Vacuum Pump, Vacuum Air Tube, Pail (40 lbs. capa-city), Valve Chamber, Milk Tube Claw and Set of 4 Teat Cups with Rubbers complete.

Each unit is complete in itself and is in no way connected with the others, so that if for any reason one unit is out of commission, milking can still be carried on by the others.

Each cow's milk is kept separate and can be weighed in the pail without loss of time in dumping into a hand pail.

Hinman Milkers do not require frequent adjusting after they are installed. They operate practically the same every

The Simplicity of the Machine here shown is such that it can be readily understood and successfully operated by most any person old enough to milk cows by hand.

Space Will Not Allow a detailed description, but some of the advantages are as follows:

Low in First Cost-200 to 225 Dollars will usually equip a dairy barn with an outfit suitable for milking 30 cows (not including power).

Low in Cost of Operation—Approximately 2 Dollars per year per unit will keep it in supplies and good running order.

Little Power to Operate—One to one and a half H. P. Gasoline Engine or one H. P. Electric Motor, will be ample to run 3 or 4 units.

Easy to Clean—It will be noticed that since milk or spray is not drawn into tube above valve chamber in pail cover, that there are very few parts to keep clean and none of them small or complicated.

No Vacuum Tank or Pipe Lines-The Hinman is operated by a simple wood drive rod moving back and forth through guides placed on stanchions at the head of the cows.



SIMPLE, DURABLE, EFFICIENT, ECONOMICAL—Saving Time, Labor, Money—Solving Your Labor Troubles.

ASK FOR A (Free) 32 PAGE HINMAN MILKER CATALOGUE.

This book describes in detail the Evolution of the Hinman Milker, and why it is so universally used. It also shows different types of machines, and is a complete guide to those considering milking their herd by the use of machines. Names and addresses of prominent breeders of registered cattle are also given so that it is made easy for you to make a thorough investigation and so determine for yourself the satisfaction they are likely to give you before you make any investment.

DON'T WAIT ANOTHER YEAR

Thousands are already making additional profit by using our machines. Have solved for themselves the hired help problem. You Can Do as Well as Your Neighbor. A Postal Will Do.— Have solved for Send it Today.



Dairy Sterilizer and Deodorant

A Great Labor and Time Saver for the Dairyman and the Dairyman's Wife

B-K Helps You

To Clean Separator. A little B-K mixed with water, and used to start the separator, will prevent the slime from sticking. It comes off without scraping, and cleaning is made easy. Rinsing discs and parts after washing, prevents foul odors, and helps you to keep your cream cleaner and sweeter. Send for bulletin No. 112.

To Keep Milking Machine Tubes Clean. Add a little B-K to the tank for keeping your tubes and cups. B-K will kill the bacteria and keep the tubes sweet. It also keeps the milk from sticking to the tubes, makes cleaning easier and cheap. Helps to keep down bacteria count and to keep milk from souring. Send for bulletin No. 124 on milking machine cleaning.

To Sweeten Churns. Foul churns may be kept sweet by rinsing them with a little B-K and water after washing. Two tablespoonfuls of B-K in a gallon of water prevents bad odors, and helps you to make better flavored butter.

B-K is a Powerful Germ and Odor-Killing Fluid

Clean and Colorless. B-K is clear as water-free from oil, sediment and color; does not discolor floors nor utensils.

Not a Poison. Using B-K as a rinse for dairy utensils is without danger to dairy products.

Powerful Bacteria Destroyer. B-K is ten times more powerful than carbolic acid for killing bacteria—more effective than steam or hot water.

Leaves No Odor After Use. When B-K has destroyed foul odors, the air is fresh, clean and inviting. No heavy creosote odors left to give taste to the milk.

Cheap and Easy to Use. Simply add a little B-K to water and rinse your dairy utensils—much cheaper than steam. A gallon of B-K makes from 250 to 500 gallons of dilution for rinsing utensils or milking machine tubes.

Not a Preservative. B-K is not put into milk; it is a sterilizing rinse for utensils. Its use according to directions does not violate laws nor adulterate nor taint dairy products. It is a great aid in producing cleaner, better milk.

If you are interested in a cheaper and better method of sterilizing milk bottles and cans, send for these free books:

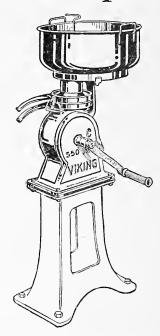
Bulletin 87, "Profit from Sterilizing Cans." Bulletin 116, "How to Sterilize Milk Bottles."

PRICES.

1	Quart :	Bottle		 				. 8	\$1.00
1	Gallon	Bottle		 					2.00
5	Gallon	Bottle		 					9.00

Awarded Gold Medal Panama-Pac. Ex.

The Viking Cream Separator



No dairyman can afford to be without a good cream separator. A separator will remove practically all the butter fat from the milk. With the old skimming system from 10 to 25 per cent. of the butter fat was left in the milk after skimming. Butter fat is too expensive for hog feed.

Expert tests have proved conclusively that the use of a hand separator in the place of setting or gravity systems of creaming will effect a saving of \$3.50 to \$7.00 worth of butter fat from one cow in one year. If you have 13 cows that means a minimum saving of \$45.00.

THE VIKING SEPARATOR PAYS FOR ITSELF IN THE FIRST YEAR. AND YOU HAVE RICHER CREAM AND MORE OF IT.

WE GUARANTEE

that the Viking Cream Separator is one of the highest grade, finest constructed machines of its kind built.

We guarantee that it will skim as closely and in less time than any other separator of equal size, regardless of price.

We guarantee that the Viking nets you more profit, with less investment, than any other standard separator.

The Viking is made in models of the following capacities:

Խ	actics.	
	Capacity per hour	Price
	A (without base)160 lbs.	\$25.00
	A (with base)160 fbs.	29.00
	B (with base)300 lbs.	40.00
	C (with base)550 lbs.	66.00
	D (with base)900 lbs.	80.00

Compare these prices with those of any other high grade cream separator you ever heard of, and you will realize the truth of our claim that the VIKING price is very attractive.

MINNETONNA HOME CREAMERY

A Combined Churn and Butter Worker for the Farm Home.

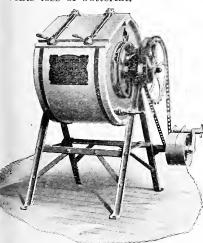
"Pour in your cream and in about 25 minutes, or less, take out finished high-grade butter—all ready to pack." That is the story of the Minnetonna Home Creamery in a nutshell.

The churning, the washing, the coloring, the salting, the working—all done in the same container by rapid mechanical processes—all done as scientifically and as efficiently as the big expensive outfits in the creameries do it. No loss of butterfat, no chance of going wrong, if the simple instructions are followed.

It's all so easy that hundreds of farmers who knew nothing about butter-making to start with, have made successes in the butter business right from the start with their Minnetonna Home Creameries.

In working principle, the Minnetonna is really a miniature of the wonderfully efficient butter-making machines used in big creameries—so simplified and perfected in construction, so modified in size and price that it is placed within reach of the average farmer. It is made easy for the operator to do everything just as it should be done to make the highest grade butter.

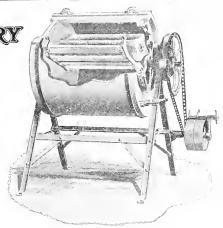
Among the several patented features that make it so efficient and successful are: (1) The removable basket, which, together with the working roll, is left in the drum during the churning and makes the churning more rapid and thorough; (2) The Minnetonna process of working the butter between two rolls—(the small or idle roll is attached to the lower end of the basket); (3) The adjustable feature of the basket which enables you to properly work a small or large quantity of butter; (4) The two-speed gearing, giving you one speed for churning and another for working; (5) The strainer tube which prevents loss of butterfat,



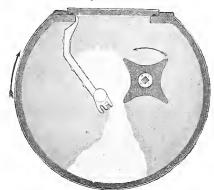
No. 3-A Minnetonna Home Creamery; hand and power. Can be belted to your gasoline engine or electric motor. Pulley, 8 x 2½ inches. Speed, 200 R.P.M. Anchor bolts, 29½ in. wide x 20½ in. long; % ln. bolt used. Power required, 4/4 H.P. electric motor: 1 H.P. gas engine. Both the 3-A and 2-C Minnetonna Home Creamery can be furnished with electric direct connected attachment, which includes motor and all necessary attachments.

chine available, for such a small price, you can no longer afford to sell your milk or cream to the creamery, for you can make it into high-grade butter and pocket the creamery manufacturing profits and butter middlemen's profits.

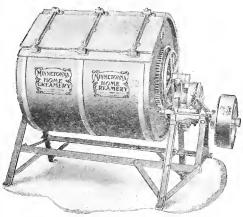
With such a ma-



No. 2-C Minnetonna Home Creamery, with part of side and one end cut away to show the position of basket and working roll inside of all Minnetonna Home Creamery models,



Cross section view of Minnetouna Home Creamery, showing how the butter is worked between two rolls.



No. 1-C Minnetonna Home Creamery. Anchor bolts, 2 ft. 3½ in. x 3 ft. 4½ in. Friction pulley, 12 in. diameter, 3 in. face. Speed, 200 R.P.M. Power required, 1 H.P. electrle motor, 2 H.P. gas engine.

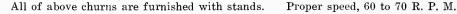
Factory No.	Capacity Drum Half Full	Working		Shipping Weight	Style	Price
No. 3-A	12 gal.	3-20 lbs	2 ft. 8 in. x 2 ft. 7 in.	195 lbs.	Hand Operated	\$27.75
No. 3-A	12 gal.	3-20 lbs	. Same	210 lbs.	Hand & Power	33.75
No. 2-C	22 gal.	5.40 lbs	. 3 ft. 4 in. x 2 ft. 7 in.	250 lbs.	Hand & Power	39.75
No. 1-C	40-gal.	10-100 lbs	2 ft. 6 in. x 4 ft. 8 in.	375 lbs.	Power	59.75

STANDARD BARREL CHURN

This Churn is no experiment. Thousands are in use in every State in the Union, and in foreign countries, giving universal satisfaction. It is made of the best kiln dried white ash the staves being tongued and grooved. The frame is of hard wood and neatly made. There are no paddles or dashers inside to cut the grain in the butter—no friction to make black streaks—is easily cleaned and operated. Therefore guarantee to make better butter and more of it than any paddle churn on the market. Instructions for making Gilt-edge Butter accompany each churn.

SIZES

No.	Holds Gallons	Churns Gallons	Price
0	. 6	3	\$ 4.25
1	. 9	5	4.75
2	. 13	7	5.50
3	. 19	10	6.00
4	. 21	12	7.50
5	. 26	15	10.25
6	. 40	25	12.00
7	. 60	40	21.25

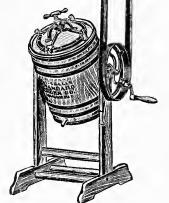


2.00 1.25

TIGHT AND LOOSE PULLEYS

With shaft like illustration, for any of the above churns which can be attached by removing three bolts and three screws and put on in place of crank shaft, are furnished as follows:





Above showing 12-in. single pulley with hand crank attached.

						Price	
12	inch	diameter	$1\frac{1}{2}$	inch	face	\$2.50	
14	inch	diameter	2	inch	face	3.00	

SINGLE PULLEYS

We can also furnish a single pulley to attach to crank shaft of any of the above churns as follows:

		Price
12 inch diameter 1	½ inch face .	\$1.50
14 inch diameter 2	inch face .	2.00

The 12-inch single pulley is fitted with a detachable hand crank so when it is fitted to a churn it can be used by hand or power.

THE LIGHTNING SANITARY CHURN AND MIXER

Is the first and only device of its kind that meets all the requirements of the exacting and up-to-date housewife.

As a churn it enables her to keep her family supplied with fresh butter which she knows to be pure, sweet and wholesome, or she can make it as necessity demands. She can do this, too, at a cost little or no greater than she is paying for an inferior article from her dealer, and with no great exertion on her part.

As a Mixer this little device is indispensable to every household.

For making a perfect salad dressing it has no equal. Here especially the sanitary metal dasher will be appreciated by every housewife. The oil cannot be absorbed as in one made of wood.

For whipping cream or beating eggs, and in fact for any number of operations that will occur to every woman, it is equally valuable. It does the work better and takes less time and effort to do it. Made in 1, 2, 3 and 4 quart sizes.

PRICES.

1 Quart\$1.00	Postpaid \$1.15	3 Quarts\$1.50	Postpaid	\$1.65
2 Quarts 1.25	Postpaid 1.40	4 Quarts 1.75	Postpaid	1.90





The Bent Wood Churn

The material which enters into a churn should be the first consideration. It requires something that is durable, that will remain sweet and clean, and in selecting Ash and Poplar for this purpose we have an article that possesses all these qualifications.

In construction the Bent Wood Churn excels all others in strength, beauty and simplicity. The bottom and sides are made of one piece of lumber bent into shape, thoroughly seasoned, and are fitted into grooves in the ends in such a manner as to make leakage impossible. The dasher is made of Rock Maple, a very hard, smooth, closegrained wood, that will not splinter nor wear rough, and is so arranged that it can be removed when the churn is full of cream. All the inside irons are well galvanized to prevent rusting.

PRICES.

No.	00	Will	Churn	12	Gallons	7.50
No.	0	Will	Churn	9	Gallons	7.00
No.	1	Will	Churn	6	Gallons	6.75
No.	2	Will	Churn	4	Gallons	6.25

Power Pulley for the Bent Wood Churn

This pulley is interchangeable with the crank-wheel and can be used on the regular gearing of any Bent Wood Churn, so it is only necessary for you to buy this pulley, then you can run your Bent Wood Churn with power or by hand.

The pulley is 11½ inches in diameter and will take a belt 1½ inches wide, and you can put a pulley on your line shaft of sufficient size to give the required speed to properly churn the butter.

THE PRICE OF THIS PULLEY IS \$1.50.

Tight and Loose Pulley for the Bent Wood Churn

This is made with two pulleys, 6 inches in diameter, 1½ inch face. One tight and one loose pulley. Can be attached to any size Bent Wood Churn.

This is just what you need if you desire to run your Churn with power.

PRICE \$3.00.

The Ayers Oak Dash Churn

With Galvanized Trimmings

No Churn was ever introduced to the trade that gives such universal satisfaction as has the "Ayers Oak Dash Churn."

Being very different in construction from any other dash churn, it immediately commends itself to the observer. Made from the best grade of white oak, with galvanized hoops, ash dasher and well varnished.

PRICES.

8 gallon .	\$2.50	10 gallon	\$2.75
13 gallon .	3.00	16 gallon	3.25
	20 gallon	\$3.50	

GOSHEN, IND

The Oval Churn

The staves are made of the very best white ash lumber, thoroughly kiln dried, and it is very substantially built, well finished and will last a great many years if properly cared for.

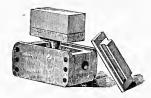
It has the best dasher action on the cream of any churn made. It will make more butter from the same amount of cream, and will positively churn quicker than any churn ever made, with the cream in the same condition.

PRICES.

		\$3.00		\$3.25
8	gallon	$\dots 3.50$	10 gallon	3.75
		12 gallon	\$4.00	



PITTSBURGH BUTTER MOULD



It is a very convenient shape and makes a nice looking print, desirable for the market, and is being adopted in other sections of the country by butter makers and packers for shipping purposes.

Price \$1.50, postpaid \$1.60

Maple Butter Bowls



Paraffine wax finish. Extra deep, heavy rimmed, nicely polished.

Diameter

in. 15 17 19 21 Price\$50 \$1.00 \$1.25 \$1.45 Postpaid ...60 1.10 1.40 1.60

GILT EDGE BUTTER LADLE

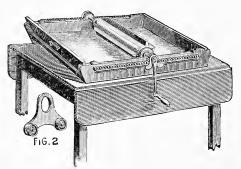


Made from clear white sugar maple.

Gilt Edge 15c, postpaid 20c.

The Anderson, same shape as Gilt Edge but not made from clear white stock.

Price 10c, postpaid 15c.



BUTTER MOULDS

These Moulds are made of the finest selected sugar mapel, thoroughly seasoned, hand carved, and are a strictly first-class mould. Made in 1-lb. size.



Price 25c, postpaid 30c



No. 2

Cow Butter Mould Our new "Jersey Cow" Mould is a very handsome design and is an artistic piece of carving.

Price 45c, postpaid 50c

Chopping Tray or Butter Bowl



It is far superior to any other Tray on the market. There is plenty of bottom to this tray so that it stands solid and is much better shape than the old-fashioned flat bottom box-shape tray.

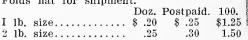
The strength is where it is most needed, being thick on bottom and ends and thin on sides.

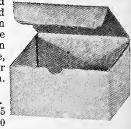
They are polished perfectly smooth and finished with Paraffine Way

ашп	e wax.					
No.	210½x19	inches.	Price	\$.35,	postpaid	\$.45
No.	312 x22	inches.	Price	.85,	postpaid	1.00
No.	$413\frac{1}{2}x25$	inches.	Price	1.10,	postpaid	1.30

Parcel Post Butter Boxes

This two-piece corrugated box is designed to hold 1 and 2 lbs. of butter when packed in a paraffined container for shipment in LOCAL DELIVERY and FIRST ZONE. The air cells in the corrugated board assist in preserving a uniform interior temperature, making possible the delivery of the butter in a cool, sweet and sanitary condition. Folds flat for shipment.





PITTSBURGH BUTTER WORKER

It is very simple in its construction, very light and easily handled and the best of the deep flange, non-adjustable roll, crank workers.

The gibs as shown in Fig. 2 have two wheels or rollers, which roll against the under side of the rack, making much less friction and easier working than those that have no wheels, but have a stationary projection that rubs along the under side of the rack.

The crank is made of galvanized iron, with a ferule that turns on the handle pin and not in the hand, which saves blistering, as is the danger where the handle is rigid and must turn in the hand.

They are of the best material and workmanship and the castings are galvanized.

No.	Size	Depth Inside	Capacity	Weight	Price
1.	14x23 in.	$2\frac{1}{2}$ in.	10 lbs.	20 lbs.	\$ 6.00
2.	17x26 "	2½ "	20 "	25 "	7.00
3.	20x30 "	21/2 "	30 "	30 "	8.00
4.	23x36 "	$2\frac{7}{2}$ "	50 "	45 ''	10.00



IMPROVED CHAMPION MILK COOLER

It is a perfect Aerator, removing all flavors arising from exces-

sive cabbage, turnip or silo rations. It is a thorough cooler, reducing the temperature of the milk

instantly nearly to the temperature of the cooling medium. It is low down, combining greatest cooling surface with least

height.

It is as simple in construction and easily cleaned as a pail-no joints or seams for the harboring of impurities and no crooked pipes to rust.

Its cost is small—compared to the saving effected it is nothing, It saves time and labor in handling of milk for any purpose.

It is a complete deodorizer, removing the animal heat or cowy taste and all odors arising from the absorption by the milk of stable or other unpleasant gases.

It is equally well adapted to the use of any cooling medium, either running water, ice water, or if a very low temperature is not required.

ordinary well or spring water.

The following sizes of the Champion are gauged as nearly as possible to take care of the milk as fast as drawn from various sized dairies with the average number of milkers. Be sure to get one large enough, as best cooling results are obtained with low pressure of milk in the receiver: Prices include double cheese cloth strainer and spring pins.



No.	Capacity Milk Receiver	Size of Dairy	Takes Care of	Price
2	18 quarts	1 to 25 cows	3 Milkers	\$5.75
3	34 quarts	25 to 50 cows	5 Milkers	6.75
4	52 quarts	50 to 100 cows	8 Milkers	8.25

STAR CREAM SEPARATOR

Easiest, Cleanest, Simplest Cream Separator of its Kind on the Market. Reversible Strainer, Cover and Aerator-Inclined Bottom.

Made of the best material to be found on the market, with the most perfectly constructed bottom, allowing every particle of cream and milk to be drawn, without disturbing the can, thereby preventing all liability of remixing cream and milk after being separated.

PRICE LIST, WITH COVER.

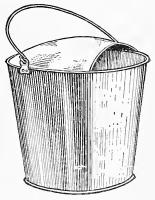
	Capacit	y Quarts	\mathbf{Price}
No. 0.	1 cow	24	\$3.25
No. 1.	1 to 2	cows 48	3.75
No. 2.	3 to 4	cows 88	4.50
No. 3.	6 to 8	cows118	. 5.25
No. 4.	8 to 10	cows130	6.00

Pilling Hard Rubber Teat Plug



The Pilling Hard-Rubber Teat Plug is especially designed for two purposes: First, to prevent dropping of milk in cows where there is relaxation of the little muscle at the end of the teat and consequent leakage of milk as soon as enough pressure accumulates in the udder; and, secondly, to dilate the canal of the teat above the muscle in cases where hard milking is due to contraction of this part of the canal.

POSTPAID 65c



FISH-MOUTH PAIL. The last word in sanitary dairy pails. 12 Qt. Size, \$1.00



PILLING TEAT OPENER

The Pilling Teat Opener differs from the Bistoury, inasmuch as the Opener is simply used as a reamer or dilator to pass the obstruction. It does not cut the obstruction as the Bistoury does. Both the Teat Opener and the Bistoury are highly recommended by veterinary surgeons, dairymen and stock breeders, who have successfully used both of these instruments for years.

POSTPAID 90c

Pilling Teat Expanders



The Pilling Teat Expanders, of metal, nickel plated, is intended to expand and enlarge the opening of hard-milking teats. Also, at the same time, it expands the milk canal. Easy to use. Sent prepaid, with full directions. Price, 65c.

Pilling Milking Tubes

For Sore and Obstructed Teats and Hard Milking Cows



Can be made any length by moving the adjustable slide; can also be used for a probe to pass the obstruction. PRICES.

23/4	inch,	each,	postpaid\$0.95
31/4	inch,	each,	postpaid 1.15
33/4	inch.	each,	postpaid 1.35

"FACILE" IMPROVED IRON FRAME HAND BABCOCK MILK TESTER

Several attempts have been made to copy this machine, but so far none have been produced embodying all of its desirable features and it remains today the leading Babcock machine.

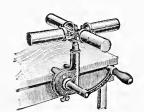
Handsome cast iron case and cover, cut spur and worm gearing, malleable iron carrier, seamless brass detachable swinging pockets for holding test bottles, enclosed gearing, bottles perfectly horizontal when rotating, turns easily and runs smoothly and noiselessly, at a very high speed.

6 Bottle Tester \$ 9.00	8 Bottle Tester\$10.00
10 Bottle Tester 12.00	12 Bottle Tester 14.00
24 Bottle Tester Factory Style extra	

Prices include full set of glass ware, comprising test bottles, pipette and acid measure; also test bottle brush and bottle of acid.



THE "FACILE" Jr. BABCOCK MILK TESTER



An exceedingly simple, light and compact and carefully designed apparatus, especially adapted to the use of the dairy, and also on account of its light weight, to the Traveling Dairy Inspector.

Working parts consisting of but two cut gears, namely, a steel spiral gear and steel spindle with worm thread, entirely enclosed in handsome cast iron case.

Fitted with deep seamless brass swinging pockets and malleable iron tinned head. Absolutely safe. Hot water may be put in pockets to keep fat melted.

Turns very easily without vibration or jar, and can be readily attached for operation to any table or bench.

Complete with full set of glassware, consisting of test bottles, pipette and acid measure, also test bottle brush and bottle of acid, with full directions for use.

			;	Price	Postpaid
1	2 bottle "Facile J	r." Machine,	with milk test bottles	\$4.25	\$4.55
	2 bottle "Facile J	r." Machine,	with 2 milk and 2 cream t	est bottles. 4.75	5.05
	4 bottle "Facile J	r." Machine,	with milk test bottles	5.25	5.50
	4 bottle "Facile J	r." Machine,	with 2 milk and 2 cream t	est bottles. 5.75	6.05

IMPROVED DECIMAL MILK SCALE

This Spring Balance is intended especially for use in connection with the Babcock Test for keeping records of the quantity of milk from individual cows, together with the per cent fat, so as to calculate the butter yield. The Scale is provided with a loose pointer, which, by means of a thumb screw, may be set anywhere on the dial to offset the weight of the milk pail, so this does not have to be deducted from the reading. The reading being in pounds and tenths of pounds makes the calculation very much simpler than when pounds and ounces are given, as on the ordinary scale. We recommend this scale highly for dairymen's use.

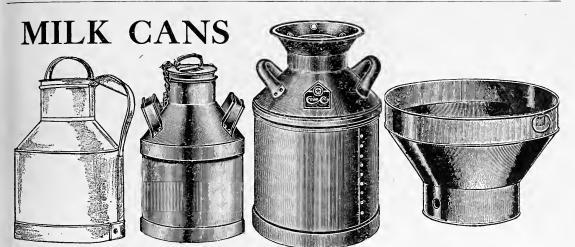
30	lb.	Scale,	weighing	$\mathbf{b}\mathbf{y}$	1-20	Ĭb.,	each	\$3.0	00	Postpaid	\$3.15
60	lb.	Scale,	weighing	by	1-10	Ϊb.,	each	3.5	50	Postpaid	3.65
120	lb.	Scale,	weighing	by	1-5	Ĭb.,	each	5.5	50	Postpaid	5.70

These same Scales can be furnished to weigh by ounces at the same prices.

MORE MILK

More profit by using Unicorn Dairy Ration. Ninety pounds of Unicorn is equal to one hundred pounds of any ready ration or \$3.00 per ton greater value. It is palatable, bulky, rich in protein, and highly digestible. Unicorn possesses all those qualities that make a commercially successful ration. It is the only absolutely pure high grade ration made in the United States today. Used and endorsed by nearly all Experiment Stations and Agricultural Colleges. Circular and prices on request.





O. M. R. R. MILK CANS

O. M. PITTSBURGH

CREAM CITY PITTSBURGH MILK STRAINER

0. M. R. R.—Heavy Hoop style, made in four sizes. ½ gallon, each 75c; dozen, \$7.00. 1 gallon, each, \$1.00; dozen, \$10.00. 2 gallon, each, \$1.25; dozen, \$12.75. 3 gallon, each, \$1.60; dozen, \$16.75.

0. M. Pittsburgh—1½ in. steel bottom, hoops firmly riveted to the lower edge of body. 5 gallon, each, \$2.50; dozen, \$27.00.

Cream City—Extra heavy seamless steel bottom, heavily coated with pure tin. Price—5 gallons, each, \$2.75; dozen, \$31.00. 10 gallons, each, \$3.50; dozen, \$39.00.

Pittsburgh Milk Strainer—Fitted with hoop for cloth. Made to fit Pittsburgh and Cream City Pattern Cans, heavy extra bright tin. Size 10¼" top, 4%" bottom, height 7¼". Price, \$0.60.

Postpaid, \$0.70.

Plates with name and address—Less than dozen, 25c each; dozen and upwards, \$2.50 dozen.

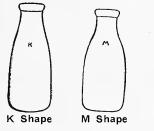
The Essex Extra Heavy Milk Bottles

All Bottles Sealed and Capacity Guaranteed to Conform with State Laws

The Extra Heavy Milk Bottles are made in three different shapes. Please specify style wanted when ordering. We recommend the style "K," which shows deep cream

	Dozen.	Half Gross.	Gross.
Quarts	.\$0.60	\$3.00	\$5.75
Pints	50	2.50	4.50
Half Pints	40	2.25 -	4.00
Plates for lette	ering, \$1.	75.	

Plates for lettering, \$1.75. Special prices on larger quantities.



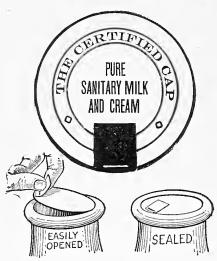


PERFECTION Milk Bottle Basket

All Perfection Baskets are made up of plain annealed bands. They have extra heavy top and handle, made to last a lifetime.

				Each	Dozen
6	pint	Heavy	Ribbon	Basket\$1.25	\$14.00
8	pint	Heavy	Ribbon	Basket 1.40	16.00
6	quart	${\bf Heavy}$	Ribbon	Basket 1.25	14.00
8	quart	Heavy	Ribbon	Basket 1.40	16.00

The Certified Milk Bottle Caps



Made of 35 per cent. point board.

1 Tube (about 450 caps), 40c; postpaid 50c. 5 M, \$2.50; postpaid \$2.75

50 M, in Barrels, F. O. B. Factory, \$24.00 Add 2c per thousand to above prices for 40 point board.

PRINTING

All lots of 50 M or more, will be printed in one color, either Red, Blue, Green, Black or Purple, free of charge.

HANDLES, RED.

All lots under 50 M (for which we do not hold an electro) will cost 50c—there will be no charge on repeat orders from these same electros, in any quantity.



Perfection Pull Caps

Made of 50 per cent. Sulphite Board, 40 point thickness—well paraffined.

PRICES.

5 M\$2.50. Postpaid \$2.75

50 M in Barrels, F. O. B. Factory.....\$24.00



All lots of 50 M or more, will be printed in one color, either Red, Blue, Green, Purple, Black or Brown, free of charge. Printed in two colors, 1c per M extra.

No charge made for special printing in quantities of 50,000 or over.

Plug Milk Bottle Caps



These caps are made from the very best grade of spruce-sulphite pulp board and are odorless and tasteless. A pure white paraffine is used for water-proofing them. The ink used for printing these caps is especially manufactured for this purpose and will not spread or fade if bottles are submerged in water.

Printed in Red, Blue, Green, Purple, Black or Brown. No charge made for special printing in one color in quantities of 50 M or over.



If some special design or trademark is wanted a small charge will be made for the engraving. This expense, however, is charged on the first order only, and the design can be used by the purchaser on all future orders. We will furnish samples showing the different styles of printing on request.

PRICES

Size—
No. 2—1 M.\$0.60 Postpaid \$0.70 No. 2—5 M.\$0.60 Postpaid \$0.70 No. 3—5 M.\$1.85 Postpaid 2.10 No. 3—5 M.\$2.00 Postpaid \$2.25 Owing to the frequent changes in prices of raw materials from which these caps are manufactured the above prices are subject to change without notice.

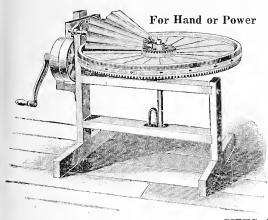
PATTERSON "PIONEER" BRAND PARCHMENT PAPER



This genuine Vegetable Parchment Paper is guaranteed to contain no oil, grease, paraffine or wax. It makes the best package in which to deliver butter, cheese, lard, smoked salt or fresh meats, fish and other products.

1,000 sheets 8 x 11 in........\$1.50 per 1,000—Postpaid \$1.65 1,000 sheets 9 x 12 in.......\$1.60 per 1,000—Postpaid \$1.75 Special prices on larger quantities.

Dairy Size V. F. M. Butter Worker



The table of the V. F. M. Butter Worker is circular, made of hard wood firmly secured to a circular cast iron bed, which will not shrink or warp when wet, but always keep true and in place.

The table revolves upon an upright iron shaft, requiring the least power to run the Worker, and does away with all rattle and noise. An iron shaft runs the full length of each of the two corrugated rollers.

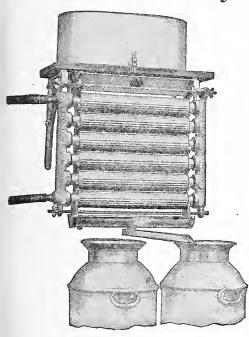
The table inclines towards the center and has a central drip. A raised wood rim around the outer edge of the table prevents the butter from falling off.

The frame is made of heavy hard wood. The castings are galvanized and all parts are interchangeable and easily replaced.

This Worker is furnished with both crank and pulleys and can be run either by hand or power.

SIZES AND PRICES

Perfection Sanitary Milk Cooler and Aerator



The Perfection Sanitary Milk Cooler and Aerator meets the needs of the dairyman in a practical way, because it is a perfect cooler and aerator and can be applied to all conditions on the dairy farm. It is intended to be hung on brackets against a wall or partition in a convenient place, preferably outside the barn, or may be suspended from ceiling on rods.

WATER—Running water is preferred, but if you do not have this a barrel may be placed above the cooler and pumped full, and hose connected to the inlet at bottom; the water will then flow through each cylinder, finding its way to the outlet from top cylinder. Note that the water passes continuously through each cylinder.

Twelve Reasons Why You Should Use the Perfection Sanitary Milk Cooler and Aerator

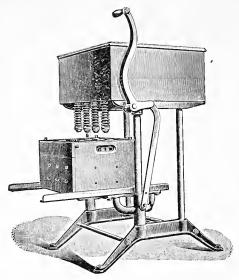
- 1. It is the most practical Cooler and Aerator.
 - . It is the simplest to operate and easiest to clean.
- 3. It has removable cylinders and gutter.
- 4. Can be washed inside and out and prevents any sediment from forming on the inside of cylinders.
- 5. It has corrugated cylinders that retard the flow of milk and give a greater efficiency.
- 6. Every inch of the surface can be washed with an ordinary scrubbing brush.
- 7. No soldered joints to leak. The cork washers take
- up the expansion and contraction.
- 8. By loosening three thumb nuts entire Cooler can be taken apart.
 9. Has greater strength. Will withstand 75 pounds pressure.
- 10. A perfect and uniform flow of water through every cylinder.
- 11. The cylinders are interchangeable.
- 12. In event of an accident you buy a new part instead of a new Cooler.

SIZES AND PRICES

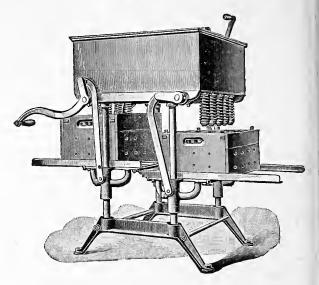
Cooler Complete Consists of Cylinders, Racks, Water Column, Milk Reservoir, Removable Troughs and Brackets

No.	No. of Cows intended for	Capacity per hour gallons	Capacity of reservoir quarts	Length over all inches	Length of cylinder inches	Height over all inches	No. of Cylinders	Price
0	1 to 4	20	18	23	14	19	4	\$14.00
1	4 to 12	35	26	23	14	25₺	j 6 j	18.00
2	12 to 20	50	32	27	18	$25\frac{1}{2}$	6	24.00
3	20 to 40	65	42	33	24	25½	6	30.00
3½	30 to 60	85	42	33	24	25	8	45.00
4	40 to 100	120	70	45	36	35	8	70.00

Perfection Bottle Fillers







B2 DOUBLE END

All Perfection Fillers are fitted with cap-seat sealing valves, the only absolutely sanitary all metal valves.

Fills every bottle uniformly to within one-sixteenth inch from eap, just far enough away to prevent cream from sticking to it.

Valves seat on cap-seat of bottles and fill without waste even though tops of bottles are chipped or broken off.

Lever locks automatically and gives operator use of both hands to cap bottles while another row or case is being filled. Fill in standard cases 4½ inch centers for quarts, 3¾ inch centers for pints, but may be made to fit any special case. Valves center bottles automatically. Drip pans not necessary, no waste or overflow cap-seat sealing valves.

Absolutely Sanitary—All metal valves, few parts; straight openings, no rubber coming in contact with milk, all joints and corners filled with solder.

Construction—Tanks are made of best copper plate heavily tinned on both sides, lids are made of best coolley K four cross tin plate, extra strong cast iron base, with steel supports, and special seamless brass drawn valves; all parts are fully guaranteed against defective material and workmanship; finished in aluminum bronze with deep maroon base, making an attractive addition to any dairy.

B-1 Single End fills 4 bottles in a row. Adjustable for pint or quart bottles. Fills at a rate of 800 bottles per hour. Complete with cover and removable strainer.

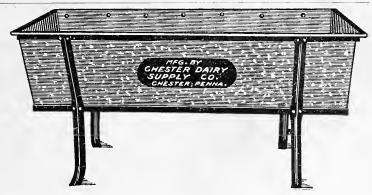
Price \$65.00 F. O. B. Factory

B-2 Double Ends fills 4 quart bottles in a row on one end and 5 pint bottles in a row on the other. Fills at rate of 1500 bottles per hour. Complete with removable strainer and removable cover.

Price \$85.00 F. O. B. Factory

			Plain	Iron Bound
No. 19, 3x4 quart	sanitary cases for	use in same, each	\$1.00	\$1.20
No. 20, 4x5 pint	sanitary cases for	use in same, each	1.00	1.20
No. 59, 4x4 pint	sanitary cases for	use in same, each	1.10	1.30

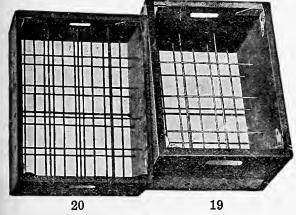
Chester Sanitary Wash Sink



Sanitary All-Metal Wash Sink, for washing bottles, is made with soaking and rinsing compartments. The two-compartment sink is arranged so bottle washer may be mounted on one side, the bottles soaked and washed, then rinsed on the other. The three-compartment sink has irons in center so double brush washer may be mounted and one operator wash from each side. There are three compartments, two for soaking and washing and one for rinsing. The operators face each other, one on each side of sink, and pass the washed bottles to right in large rinse compartment. The bottles are then taken out and placed in cases. FRONT OF SINK INCLINES SO OPERATOR DOES NOT STRIKE HIS KNEES. The very best grade of galvanized steel is used, and all joints are double-seamed with our special extra heavy seaming machinery, making them much stronger than the ordinary riveted method and impossible to leak. Legs are removable and made of heavy angle iron. This makes a very stiff and substantial sink. Work-manship and material guaranteed. We recommend the use of noiseless water heaters in these sinks.

		Length	wiatn	Deptn	neignt	Price
No. 1-2 compartments each,	30x22	60 in.	20 in.	15 in.	36 in.	\$22.50
No. 2-2 compartments each,	37x28	74 in.	28 in.	16 in.	36 in.	27.50
No 3-3 compartments	-36x48	84 in.	48 in.	16 in.	36 in.	42.50°

Sterilizing attachment made to fasten on end of sink, price on application. F. O. B. Factory.



Showing Pressed Galvanized Corner Irons

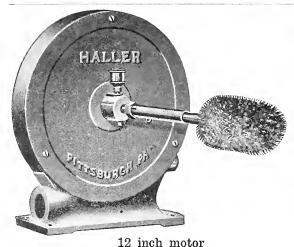
SANITARY WIRE BOTTOM BOTTLE CASES

Here is the square 12 quart case No. 19, spaced three bottles wide and four bottles long. Is well made with corner irons well riveted in and with all wires riveted, making a good, substantial, durable, as well as sanitary crate at a reasonable price. The ends are of hardwood with neat hand holes, the sides of soft wood.

The No. 20 case is for pint bottles and is arranged to hold 20 bottles, four bottles wide by five long. The width and length of this case are the same as the No. 19 quart case and will stack one on the other, each case being held in proper position by the corner irons.

Iron

Plain	Bound
No. 19, quart case, 12 bottles 3x4, depth 101/4 in., width 14 in., length 185/8 in.	
outside and with bottle spaced 41/8 inch from center of one bottle to	
center of other	\$1.20
Lots of 100 or more	1.10
No. 20, pint case, 20 bottles 4x5, depth 81/4 in., length 185/8 in. outside, bot-	
tles spaced 3 5-16 inch centers	1.20
Lots of 100 or more	1.10
No. 59, pint case, 16 bottles 4x4, depth 81/4 in., width 14 in., length 185/8 in.	
outside, bottles spaced 41/8 inch centers 1.10	1.30^{-}
Lots of 100 or more 1.00	1.20
We carry above sizes in stock. Other styles and sizes F. O. B. Factory.	





Pulleys are of 21/4 in. Diameter.

Haller Steam Turbine Bottle Washer

This machine is constructed on the same principle as our other washers and operated by steam power.

All bearings are fitted with improved grease cups to prevent lubricant from dripping into wash tank.

All bearings have special bronze bushings. Capacity about 3000 bottles daily.

Price with single brush, \$30.00

HALLER'S THREE-BRUSH WASHER (Belt Driven)

This machine is especially constructed to be driven by belt and made of most serviceable material.

Spindles are of Special Cold Rolled Steel Shafting. Bearings are all babbited and supplied with oil cups.

The brush holders are made of brass and the brushes are so arranged that they can be easily removed after bottles have been washed.

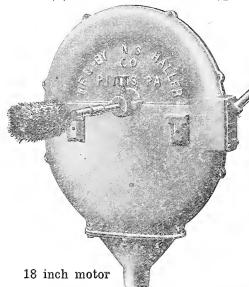
This machine is specially adapted for washing milk bottles, tumblers and open top sanitary cans.

Capacity 4,000 bottles daily

Price, complete, with one set of brushes\$30.00

This Three Brush Washer Belt Driven can be furnished in such a way that bottles can be washed on both sides of washer at the same time by two operators. This is known as our Double End Type Three Brush Washer.

Price, \$40.00. Complete with ¼ H. P. 1250 Rev. 2" Pulley Electric Motor..\$80.00



THE HALLER SINGLE BRUSH WATER MOTOR BOTTLE WASHER

This bottle washer is so constructed to give the most power for the least amount of water consumed and is made of best material by skilled workmen.

It has interchangeable jets for the different water pressures, and compression grease cups for the bearings.

We would recommend this style of motor for use in dairies where an average of 3,000 bottles are washed daily.

Can be equipped with connection from $\frac{1}{2}$ to $\frac{21}{2}$ inches.

Price, complete, with one set of brushes, \$30.00
Our Motors run absolutely noiseless

HALLER'S CYPRESS WASH TANK

These tanks are made of the best one and a half inch Cypress well seasoned and kiln dried. All joints tongued and grooved and thoroughly bolted together, also has brass sink outlets.

Dimensions, 6 ft. x 3 ft. x 16 in. deep.

Price, complete, \$22.00

BRUSHES FOR THE DAIRY

Milk Bottle and Jar Brushes



No. 86-S-2—Russia bristles, brush part 2% in. diam., $7\frac{1}{4}$ in. long, $\frac{5}{8}$ in. diam., maple handle, 10 in. long.

Price 40c. Postpaid 45c. Dozen \$4.25. No. 82—Extra stiff gray hair, brush part 3 in. diam., 9/16 in. diam., hickory handle, 10 in. long.

Price 35c. Postpaid 40c. Dozen \$3.50



No. 123—Gray hair, brush part tapered 3 in. to 1% in. diam., 7 in. long, hickory handle % in. diam., 3% in. long, tapered.

Price 40c. Postpaid 45c. Dozen \$4.25.

No. 124—Gray hair, brush part tapered 3 in. to 1% in. diam., 7 in. long, hickory handle 11/16 to 5% in. diam., 9 in. long.

Price 40c. Postpaid 45c. Dozen \$4.25.

HAND BRUSH



No. 86—Pure bristle, large size, $\frac{1}{2}$ in. diam., maple handle, 10 in. long.

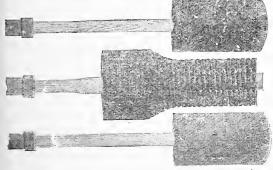
Price 40c. Postpaid 45c. Dozen \$4.25.

FOR MACHINE WASHER



No. 81-Turbine.

Price 30c. Postpaid 35c. Dozen \$3.00.



No. 100—Center Brush for cleaning outside of bottles.

Price 60c. Postpaid 65c.

No. 101—Outside Brush for cleaning inside of bottles.

Price 40c. Postpaid 45c.

Complete set 3 Brushes \$1.40...Postpaid \$1.50

Separator Spout Brushes



No. 27—Russia bristle, brush part 5 in. long, length over all 16 in., plain end, diameter 1¼ in.

Price 20c. Postpaid 25c.

No. 116—Air Tube Brush, suitable for most any style filling machine, black hair, brush part 3/16 in. diameter, 3 in. long. Length over all 24 in.

Price 10c. Postpaid 15c.



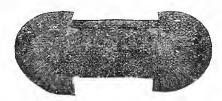
No. 33—For Sharples Separator No. 1, No. 2 and No. 3 Palmetto Fibre Brush, 2 in. diameter, 3 in. long, length over all 18 in., heavy stem wire, large ring on handle.

Price 10c. Postpaid 15c.

No. 34—For Sharples Separator No. 4, No. 6 and No. 9. Palmetto Fibre brush, 21/8 in. diameter, 4 inches long, length over all 24 inches, heavy stem wire, large ring on handle.

Price 15c. Postpaid 20c.

Palmetto Milk Can Brush



No. 08—Palmetto fibre, solid block, 6% in. long, face $9\frac{1}{2} \times 5\frac{1}{2}$ in. Made of an excellent grade of durable fibre, very full, with flaring wings. Unquestionably the best milk can brush on the market.

Price 30c. Postpaid 35c. Dozen \$3.00.

Genuine African Bass Stable Broom



No. 0286

Solid Block. Length of Stock, 5 1/4 in. clear. 4 row, 14 in. long, complete with handle. Price 60c. Postpaid 70c

FARM BOOKS

WEALTH FROM THE SOIL

By C. C. BOWSFIELD

This distinctive book, by an expert, tells how to engage in farming with certainty of success. It shows how to obtain the best results from the land and points the way to wealth, health and happiness for both the beginner and the experienced farmer.

A vital, practical book for everybody. Bound in Cloth, 320 pages.

Price, Postpaid, \$1.10.

THE BACK YARD FARMER

By J. WILLARD BOLTE

This is the most helpful and charming garden book ever published. In a clear and interesting manner it tells how to get the biggest results and better food and better health from the wonderful possibilities of the back yard.

Price, Postpaid, \$1.10.

SUCCESS WITH HENS

By ROBERT JOOS

This book is a reliable guide to poultry-raising that thoroughly covers the subject by an expert. It is clear, practical and up-to-date. Nothing is given but the best methods and only those which have been proved by the experience of successful poultry keepers.

Price, Postpaid, \$1.10.

MAKING THE FARM PAY

By C. C. BOWSFIELD

This very important books tells how to get the biggest returns from the soil and make farm life more attractive and successful. Farming opportunities, the marketing of produce, the raising of vegetables, fruit and poultry, dairy products, and all phases of agriculture are discussed by an expert.

Bound in cloth, 300 pages.

Price, Postpaid, \$1.10.

HOW BOYS AND GIRLS CAN EARN MONEY

By C. C. BOWSFIELD

Author of "Making the Farm Pay," Etc.

A book which tells boys and girls how to do hundreds of useful, practical things in their spare time after school and during vacations. It is a needed book which not only encourages thrift but teaches the child how to spend the time happily as well as profitably. Children will enjoy this book and every parent and educator would wish it to be widely circulated.

Price, Postpaid, \$1.10.

	Postpaid	Post	paid
Productive	Farm Crops\$1.75	Management and Feeding of Sheep	2.20
"	Swine Husbandry 1.75	Milk Testing	1.10
"	Feeding of Farm Animals 1.75	Types and Breeds of Farm Animals	2.20
"	Horse Husbandry 1.75	Farmers' Account Book and Farm Record	2.50
"	Poultry Husbandry 2.00	Farmers' Cyclopedia of Agriculture	3.50
"	Vegetable Growing 1.75	Farm Machinery and Farm Motors	2.00
"	Orcharding 1.75	Farm Management	1.85
Common D	Diseases of Farm Animals 1.75	Dairy Cattle	1.70
King's Soi	l Management 1.60	Crops and Methods for Soil Improvement	1.35
Cereals in	America 1.85	The Horse Book	2.00
Fertilizer	and Crops 2.70	Feeds and Feeding	2.25
Forage and	d Fibre Crops 1.85	Watts Vegetable Gardening	.85
Book of Al	Ifalfa 2.10	Soil Fertility and Permanent Agriculture	2.35

To the Reader: We trust you will bear in mind that this catalogue is intended to represent our Agricultural Implements, Farm, Garden and Dairy Supplies which constitute but a small part of our complete line. We issue two other catalogues as follows: One on Vegetable and Flower Seeds; one on Poultry Supplies, either or both of these catalogues will be sent free on request.



Seeds

Agricultural Implements

Poultry and Dairy Supplies

The I. W. SCOTT CO.

3-5 Graeme St.—514 Liberty Ave.
PITTSBURGH, PA.

The I. W. SCOTT CO.

5 Graeme St. ~ 514 Liberty Ave. Pittsburgh, Pa.

Price List of Field Seeds

March 10, 1917

Terms on Field Seeds strictly cash F. O. B. Cars Pittsburgh, Ask for special prices on large quantities. Samples will be mailed on request.

The following prices are for immediate orders and prompt shipment.

TIMOTHY

Per bu. 45 lb. Sacks 25c each Half Bushels at Bushel Rate,

					better	3.75
	XXX	- "	99.50	"		3.25
2	XX	- "	98.00		"	3.00

CLOVERS

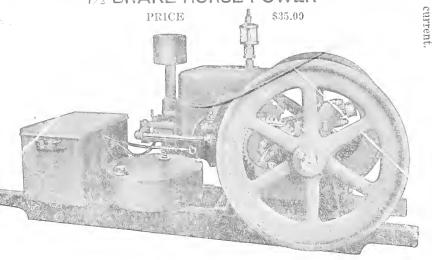
Per bu. 60 lb. Sacks 25c each Half Bushels at Bushel Rate.

-							
Medium Red		Purity	99.75	or	better		15.50
66 61	-A A A	"	00.00	66		*******	14.50
"	-A A	"	99.00	"	"		13.50
Mammoth"		"	99.50	"			14.75
"	-AAA	66	99.00	"	66		13.75
Alsike	-Special	6.6	99.25	"	"		14.75
"	—A A A	"	98.00	66	"		13.75
Alfalfa	-Special	"	99.75	"	4.6	•••••	12.00
Crimson	- "					•••••	
Sweet	-White B	lossom	, hulle	ds	eed		13.00
66	-Yellow	"	66	•	"		11.50
White	-Special-	-per lb				55	ic
6.6	—A A A	- "				50)c
*Idaho Grown							

Buy our SPECIAL or HIGHEST GRADES if you want Purity and High Germination.

PITTSBURGH GASOLINE ENGINE 11/2 BRAKE HORSE POWER

Spark Timing Lever. To prevent engine kicking backward while starting, and injuring operator a spark timing device is provided. When this lever is thrown backward engine may be started by a child without danger of injury.



Ignition is by the Jump Spark method. This type has been found most suitable for small engines, used about the house, as it is not noisy, and is very economical of battery

The $1\frac{1}{2}$ H. P. Pittsburgh Gasoline Engine is manufactured, not built. All parts are made in lots of 1,000 or more in exactly the same manner as parts for the very best automobiles.

PEAS AND BEANS

Per bu. 60 lb.	Sacks 25c each
	\$3,75
Cow Peas-Whippoorwill .	3.50
" —New Era	
" —Mixed	3.25
Sov Beans-Mammoth Yell	ow\$3.50
Medium Gree	nPrice Later
" —Wilson	

BUCKWHEAT

Per bu. 48 lb.	Sacks 25c each
Tapanese	\$1.75
Silver Hull	2.25

MISCELLANEOUS SEEDS

Sacks for 30 lb. and upward 25c each

	5 lb.	10 lb.	30 lb.	60 lb.
Dwarf Essex Rape	\$.75	\$1.25	\$3.25	\$6.00
Hairy Vetch	1.50	2.50	6.25	12.00
Spring Vetch		1.25	3.25	6.00
Speltz		,75	1.75	3.00
Kaffir Corn			••••	
Broom Corn		1.50	3.60	6.00
Sunflower	.75	1.25	3.00	4.80

While we exercise the greatest possible care to supply all seeds of high quality, we give no warranty as to description, quality or productiveness of the seeds we send out and will not be in any way responsible for the crop.

Our catalogue of Agricultural Implements, Farm and Garden Supplies will be mailed free on request.

EVERYTHING FOR FARM, GARDEN AND POULTRY

THE I. W. SCOTT CO.
5 GRAEME ST. 514 LIBERTY AVE.
PITTSBURGH, PA.

ORDER SHEET

THE I. W. SCOTT CO.

Seeds, Farm Machinery, Poultry Supplies — Everything for Farm, Garden and Poultry —

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PITTSBURGH, PA.

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Name	
Post Office	County
Freight or Express Office	State
I enclose	for \$
amount to be added for postage is given in connection	catalogue, we pay the postage on all Vegetable and Flower Seeds in packets, ds and upward. On Peas, Beans, Corn, Onion Sets, etc., in pints and quarts, the with the prices. On half pecks, pecks, and larger quantities, postage must be able, which also applies on all other articles of merchandise mailable by Parcel

SEEDS BY FREIGHT OR EXPRESS We will deliver free by Freight or Express (at our discretion), all orders for Vegetable and Flower Seeds aggregating \$10.00 or over, to any point in Pennsylvania, Ohio, West Virginia or Maryland.

QUANTITY PRICE ARTICLES Amount forwarded

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SPECIAL NOTICE	• We shall esteem it a great fa • Market Gardeners or Truck Fa	vor if you will give us in the spaces below the armers among your acquaintances. We wis	ne NAMES and ADDRESSES h to send them our Cata	of any
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CARD

Should you not be interested in the goods described in this catalogue, (or if you have already received one), you will confer a favor that will be interested in

FARMING OR GARDENING
In your neighborhood.

THE I. W. SCOTT CO.



PULVERIZED

SHEEP MANURE

Gives the Soil What it Needs to Make Things Grow



Humus

HUMUS is one of the most important and valuable elements in the soil, and the fact that Wizard Brand Sheep Manure is purely a natural organic matter or humus product recommends it most highly to the thoughtful consumer.

The Humus supplied in Wizard Brand Sheep Manure should not be confused, however, with the commercial products being offered as pure humus, which in reality are nothing more than peat or bog soil containing practically no plant food value other than what is known as Humus Nitrogen, only about one half of which is soluble, available or useful in the soil or to the crop.

Wizard Brand Sheep Manure supplies as much organic matter or humus as the above mentioned products and double the amount of soluble or available nitrogen in addition to liberal percentages of Phosphoric Acid and Potash, all of which are in the best possible form for Nature to work with.

Wizard Brand Sheep Manure gives the soil what it needs to make things grow.

5 lbs\$.25	100 Jbs\$1.85
10 lbs	500 lbs 7.50
25 lbs	1000 lbs14.50
50 lbs 1.10	2000 lbs 28.00

THE I. W. SCOTT CO.

5 Graeme St. and 514 Liberty Ave. PITTSBURGH, PENN.

NITRO-FERTILE, a Food for all Growing Plants

House Plants Flowers

Vegetable Gardens

Shrubbery Trees

ITTRO-FERTILE is nature's natural food; being in liquid form all the properties are available to plant life from the moment of application. It is quick in its action, showing effects in from three to ten days.

NITRO-FERTILE is a complete food, containing all the elements required for plant growth that can be put into the soil, and will sustain the growth it makes.

This liquid fertilizer does not deteriorate, contains no weed seeds and has no odor or other offensive features.

It goes straight to the hungry roots. Blossoms take on a healthier glow; flowers are maintained and developed to maximum size and quality; shrubbery attains complete growth; vegetables mature fuller and more quickly, and lawns that were formerly scanty and thin become thick and velvety.

While we don't claim impossibilities, we do claim, and are backed in our claim by the best and most prominent growers, that in Nitro-Fertile we have one of the highest grades and quickest responding plant foods on the market.

NITRO-FERTILE might at first glance look expensive but when taking into consideration that one gallon makes from 120 to 240 gallons of complete and all-available food—these facts readily make it not only one of the best but the cheapest that can be safely used for general purposes.

Do not let your plant life suffer because of the misunderstanding that in the spring is the only time to apply fertilizers. We wish to impress the fact that plant life requires food during the Mid-summer and Fall as much or more than it does in Spring. Nitro-Fertile being in a liquid form can be applied throughout the entire season.

All hardy plants and shrubbery should be pruned, cultivated and fed when through blooming to replenish and make a healthy new growth, one that will stand the

Winter and produce more and a better bloom the following season.

NITRO-FERTILE is a safe, clean and very valuable plant food for feeding house plants, or plants grown in pots. It produces a luxuriant, healthy growth, good texture of foliage and larger and better bloom.

Wonderful results have been shown by its use on bulbs.

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What Users Say:

(Names cheerfully given on request)

More Than Claimed For

"It produces twice the growth in the same length of time as manure or other fertilizers,"

Cannot Say Enough

"It has done wonders in my garden, I cannot say enough for it. My flowers and shrubs have been the talk of the neighborhood."

More Desirable to Use

"In addition to its merit as a plant food, its convenience, economy and lack of odor make it more desirable than other fertilizers."

Plants Were Dying

"My rhododendrons were dying until I treated them with Nitro-Fertile. They are now the most vigorous and healthy plants in our beds. They bloomed ahead of other plants and held their bloom longer."

Saves Late Corn

"Part of my corn was late. I used Nitro-Fertile and the late corn grew almost twice as rapidly as the other. No garden in the neighborhood could compare with mine in quantity and quality of flowers and vegetables."

For Tomatoes

"I gave a tomato plant the requisite amount of Nitro-Fertile and during the summer it bore about one hundred and sixty ripe tomatoes."

No Bugs nor Insects

"On some of my poor clay ground where nothing would grow, I had a most glorious garden of flowers by using Nitro-Fertile, and the plants are so strong and healthy that I have not been bothered as usual with bugs and insects."

Leaves Soil Loose

"This fertilizer has the additional value of leaving the soil loose and exceedingly easy to handle where it has been used several seasons."

Used in Greenhouses

"I have used Nitro-Fertile in my greenhouses and find it more than is claimed. It is not only a marvelous foliage producer, but a sure fungus destroyer. This statement I make after an experience of more than fifteen years with fertilizers, both chemical and commercial."

From Large Estates:

"We began purchasing Nitro-Fertile in gallon lots, and in every order we have increased the quantity until we are now ordering in fifty-gallon barrels. It is better than represented."

"The effect that Nitro-Fertile has on plant life is simply marvelous. I used it in the greenhouse on chrysanthemums, ferns, liliums, cypripediums, with grand results. Also used it outside on celery, cauliflower, leek and lettuce. One had only to see them to see the marked difference between those treated and those not."

MINIMINIE

"I have used Nitro-Fertile with very good results on roses, ferns, sweet peas and orchids in the greenhouse and with equally good results on the vegetable garden. One row of beans grew twice as high and produced twice the amount of well-filled pods as the next row not treated. "I have given Nitro-Fertile a thorough trial on various plants. Cyclamen and chrysanthemums that I entered in the Cleveland Flower show were fed exclusively with Nitro-Fertile and I give it credit for producing first prize winners. From my experience with various fertilizers and plant foods I can frankly say that Nitro-Fertile is more economical, easier applied and produces far better results."

3010000000

"We give Nitro-Fertile credit for saving a very valuable tree; also for growing a good stand of grass, under a very large shade tree, on the lawn where every other means had failed."

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"It gives me great pleasure to commend your Nitro-Fertile, as we have had very gratifying results from its use in the school gardens."

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"I take pleasure in saying that after having tried your Nitro-Fertile under some of the most disadvantageous, if not discouraging, conditions that we were more than pleased with the results. It seemed to be equally suitable for the various soils and plants upon which we tried it, making a larger growth than we had been able to secure before."

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"I was a little skeptical about liquid fertilizer but there is no doubt in my mind now about "Nitro-Fertile." I never used anything to equal it. Will buy in barrel lots for future use, as it will be THE fertilizer I shall use."

From a Landscape Gardener.

"Please enter my order for March delivery for sixty gallons of "Nitro-Fertile." You may be interested to learn that I am using "Nitro-Fertile" for soil inoculation and as a complete fertilizer in all my work with utmost satisfaction. I do not hesitate to say that it is the most efficient fertilizer on the market."

From a Nursery.

"A car load of shrubbery imported, delayed on road, arrived in bad condition and condemned. I bought at very reduced rates and saved all by the use of "Nitro-Fertile."

Directions:

FOR PLANTS IN THE HOUSE or under glass—dilute in proportion one tablespoonful to one gallon water.

FOR PLANTS OUTSIDE, flowers, shrubbery, trees and vegetables—two tablespoonfuls to each gallon of water, or one pint to fifteen gallons, a quart to thirty gallons, a half-gallon to sixty gallons, one gallon to one hundred and twenty gallons. Sprinkle or pour around the plant sufficient to reach the feeders of the same as in ordinary watering.

Nitro-Fertile can be applied from one to three times during the growing season, or more if needed according to the nature of the soil and plant.

Nitro-Fertile is put up in convenient containers from a half-pint to fifty gallons, and sold at the following prices F. O. B. Cleveland, Ohio:

Half-pints		-		\$.25
Pints				.40
Quarts	- ;	-		.60
Half-gallons	ļ -		-	1.10
Gallons -	-!	-		2.00
Special	quotation	s in	bulk	

Nitro-Fertile is licensed under the Ohio state laws

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Manufactured by

THE FERTILE CO.

Successor to The Liquid Fertilizer Co.

CLEVELAND, OHIO

NITRO-FERTILE

Life-giving Plant Food

THE ORIGINAL ODORLESS LIQUID FERTILIZER

FOR SALE BY

The I. W. Scott Co.
5 Graeme St.—514 Liberty Ave.
Pittsburgh, Pa.

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THE I. W. SCOTT CO.

3 and 5 Graeme Street,
514 Liberty Avenue

Next Door to Diamond National Bank

PA.

Seeds and Farm Machinery Poultry Supplies

Agricultural Implements

Our Implements—from the plow to the Threshing outfit—are all of standard makes and up-to-date in improvements.

Garden and Field Seeds

Our Stock comprises every kind of Seed that is of any value on a Pennsylvania farm or market garden.

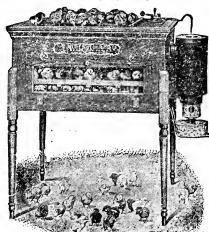
Our aim has always been to furnish high-quality seeds rather than to sell inferior seeds at low prices.



Poultry Supplies

We carry the largest variety of standard Poultry Supplies to be found in Western Pennsylvania.

Catalogue of any of the above lines free upon application.



Dairy Supplies

A complete line of Sanitary Dairy Appliances from the Pasteurizer to the Milk Bottle Cap, selected from the products of the largest manufacturers of Dairy Equipment.

Everything for Farm, Garden and Poultry